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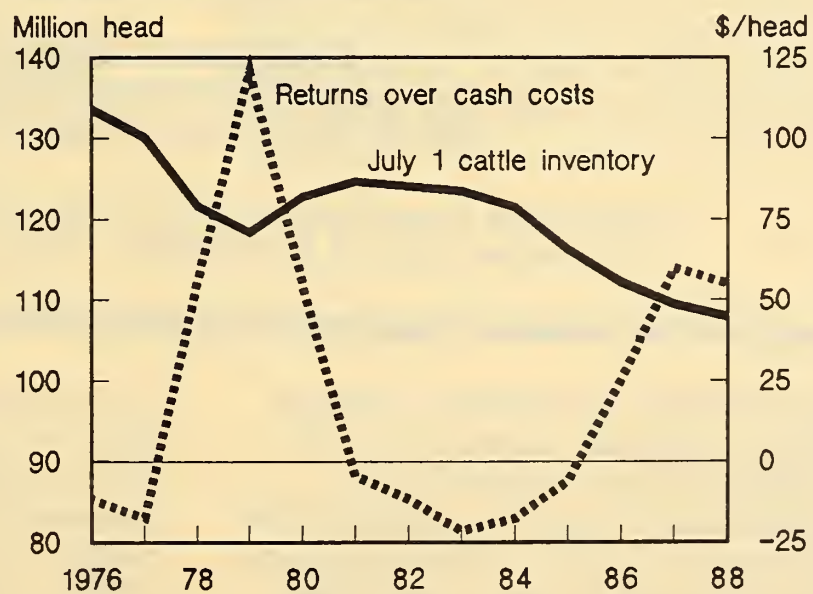
Livestock and Poultry

Situation and Outlook Report

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**Will Positive Returns Mean
Cattle Industry Expansion?**



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Principal Contributors

Ronald Gustafson (Factors Affecting
Livestock and Poultry) (202) 786-1285
Steve Reed (Cattle)
Richard Stillman (Sheep and Lambs)
Kevin Bost (Hogs)
Mark Weimar (Poultry)
Robert Bishop (Eggs)

International Livestock and Poultry:
Linda Bailey (Livestock)
Lawrence Witucki (Poultry)
Special Articles:
Larry Duewer (Boxed Beef Series)
John Ginzel (Cyclic Patterns)

Electronic Word Processing

Margie Craig
Erma McCray
Herma Tickle

Statistical Assistants

Polly Cochran (Livestock)(202) 786-1284
Maxine Davis (Poultry)(202) 786-1719

Commodity Economics Division, Economic Research Service
U.S. Department of Agriculture, Washington, D.C. 20250

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The present forecasts will be updated in the World Agricultural Supply and Demand Estimates scheduled for release on August 11.

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SUMMARY

Red meat and poultry production in 1989 is expected to decline 1 percent from the 1988 record, but remain 2 percent above 1987. Lower beef production, plus a plateauing of pork and turkey output, will more than offset a continued rise in broiler production. While per capita meat consumption is likely to decline from the 1988 record, it will remain above the large levels of 1985-87.

The U.S. cattle and calf inventory on July 1 was 1 percent below a year ago. This year's calf crop was estimated at 40.2 million head, slightly above a year ago, but the second lowest since 1961. During first-half 1988, 10 percent more heifers calved and entered the cow herd than a year earlier, suggesting that the cattle inventory may begin to stabilize in 1989-90.

Beef cow slaughter during January-July was 9 percent below a year ago, while dairy cow slaughter was down 3 percent. However, drought-reduced forage supplies and higher feed costs may delay expansion.

In 1988, beef production may drop 1 percent as expanded fed cattle slaughter partially offsets reduced nonfed slaughter. In 1989, beef output is expected to drop 6 percent as nonfed slaughter remains low and reduced feeder cattle supplies result in lower fed cattle slaughter. Prices for Choice fed steers at Omaha were record high this spring and may average \$69 this year. Reduced

supplies in 1989 may boost prices \$4 to \$6 per cwt above 1988.

With higher feed costs and lower hog prices, pork production is expected to decline about 1 percent in 1989, but remain 8 percent above 1987. Hog prices at the 7 markets may average about \$44 per cwt this year, down from nearly \$52 in 1987. Prices could average \$44-50 next year, due to reduced meat supplies.

Despite higher feed costs, broiler production remains profitable, and is expected to rise 4 percent in 1989, about the same as this year. Poor returns since mid-1987 and higher feed costs may slow turkey production increases to 1 percent in 1989, following gains of 19 and 5 percent in 1987 and 1988, respectively. Egg production may decline about 1 percent in 1989, following a 2-percent decline in 1988.

Retail prices for Choice beef may rise only 1-3 percent in 1989, following this year's 3-4 percent. Pork prices may increase about 3-4 percent in 1989, after declining 3 percent in 1988. Wholesale broiler prices may remain near 1988's 54 cents as the larger supplies are offset by strong fast food demand and lower beef supplies. A slowing in turkey production increases and smaller cold storage stocks could raise wholesale turkey prices to 68-74 cents a pound. Reduced egg supplies in 1989 could push wholesale egg prices into the 70's, compared with 63 cents a dozen in 1988.

Table 1--Livestock, poultry, and egg production and prices
(All percent changes shown are from a year earlier.)

Item	1986	1987			1988							1989 1/
	Annual	III	IV	Annual	I	II	III	I/	IV	I/	Annual	I/
Million pounds												
PRODUCTION												
Beef	24,213	6,064	5,850	23,405	5,696	5,784	6,100	5,500	23,080	5,475	21,625	
% change	+3	-3	-1	-3	-1	+1	+1	-6	-1	-4	-6	
Pork	13,998	3,384	4,061	14,312	3,787	3,726	3,800	4,350	15,663	3,900	15,525	
% change	-5	+5	+12	+2	+7	+12	+12	+7	+9	+3	-1	
Lamb & mutton	331	77	81	309	85	80	80	83	328	88	335	
% change	-6	-5	-1	-7	+12	+7	+4	+2	+6	+4	+2	
Veal	509	99	104	416	97	92	100	110	399	100	400	
% change	+2	-23	-15	-18	-13	-9	+1	+6	-4	+3	0	
Total red meat	39,051	9,624	10,096	38,442	9,665	9,682	10,080	10,043	39,470	9,563	37,885	
% change	0	-1	+4	-2	+2	+5	+5	-1	+3	-1	-4	
Broilers 2/	14,266	3,966	3,895	15,502	3,996	4,075	4,065	3,950	16,086	4,075	16,775	
% change	+5	+10	+9	+9	+7	+4	+3	+1	+4	+2	+4	
Turkeys 2/	3,133	1,100	1,082	3,717	837	980	1,045	1,030	3,892	800	3,940	
% change	+12	+17	+17	+19	+25	+13	-5	-5	+5	-4	+1	
Total poultry 3/	17,929	5,195	5,112	19,772	4,986	5,205	5,235	5,110	20,536	5,015	21,265	
% change	+6	+11	+11	+10	+10	+6	+1	0	+4	+1	+4	
Total red meat & poultry	56,980	14,819	15,208	58,214	14,651	14,887	15,315	15,153	60,006	14,578	59,150	
% change	+2	+3	+6	+2	+5	+5	+3	-1	+3	0	-1	
Million dozen												
Eggs	5,705	1,439	1,479	5,797	1,464	1,415	1,400	1,430	5,709	1,420	5,655	
% change	0	+2	+2	+2	+2	-2	-3	-3	-2	-3	-1	
PRICES												
Dollars per cwt												
Choice steers, Omaha, 900-1100 lb	57.75	65.04	64.31	64.60	68.28	72.81	65-69	66-72	68-71	67-73	71-77	
Barrows & gilts, 7 mkts	51.19	58.97	43.51	51.69	44.74	45.90	42-46	37-43	42-45	42-48	44-50	
Slaugh. lambs, Ch., San Ang.	69.46	72.90	68.36	78.08	81.51	69.52	58-62	60-66	67-70	74-80	64-70	
Cents per pound												
Broilers, 12-city avg. 4/	56.9	48.7	42.5	47.4	45.4	55.6	61-65	50-56	53-56	50-56	51-57	
Turkeys, NY 5/	72.2	56.2	60.6	57.8	48.9	51.4	70-74	74-80	61-64	62-68	68-74	
Cents per dozen												
Eggs New York 6/	71.1	63.5	59.2	61.6	55.0	53.3	70-74	70-76	62-65	69-75	70-76	

1/ Forecast. 2/ Federally inspected. 3/ Includes broilers, turkeys, and mature chickens. 4/ Wholesale weighted average. 5/ Wholesale, 8- to 16-pound young hens. 6/ Cartoned, consumer Grade A large, sales to volume buyers.

FACTORS AFFECTING LIVESTOCK AND POULTRY

Forecasts for the meat complex in 1989 are being made in an atmosphere of continued economic expansion. However, drought and prospects for a sharply lower grain harvest will reduce grain stocks. Improved weather conditions and good development of the 1989 crops are critical to rebuilding stock levels and lowering feed prices. Additional moisture will be needed this autumn to get the winter wheat crop started, and establish small grain pasture and fall pasture growth.

Economic Expansion Continues

The economy continues to expand, pointing to good demand for a smaller meat supply in 1989. Expansion led by consumer purchases is slowing, but expansion in the manufacturing sector and greater spending on plant and equipment are expected to maintain a strong economy through at least 1989. The manufacturing sector is being led by strong export demand for machinery, automobiles, and aircraft. In the first 5 months of 1988 exports rose 30 percent over a year earlier; imports have risen 11 percent, led primarily by petroleum.

Sharp reductions and adjustments in the manufacturing sector in the early 1980's were felt to have a negative impact on the meat sector and workers' purchasing power, particularly for the more expensive red meats. However, strength in manufacturing jobs and the lowest unemployment levels since the mid-1970's may provide a stronger base for meat demand in 1989.

While the economy remains strong and unemployment rates are low, inflation continues to hold near 4 percent. Inflation is expected to rise only modestly in 1989 as consumer demand slows. Interest rates have already increased in 1988 and the recent increase in the Federal Reserve's discount rate emphasizes these inflationary concerns. Further increases are likely in 1989 as the Federal Reserve keeps money supplies somewhat tight. In addition, already-strong consumer demand for credit must compete against financing needs for business plant and equipment expansion.

Feed Prices Surge; Grain Stocks Remain Large

July rains in many areas were not enough to prevent further deterioration in prospects

Table 2--Expenditures per person for red meat and poultry 1/

Year	Beef		Pork		Red meat		Broilers		Turkeys		Poultry		Total 2/	
	\$	% of income	\$	% of income	\$	% of income	\$	% of income	\$	% of income	\$	% of income	\$	% of income
1980	181.65	2.16	94.92	1.13	276.57	3.28	33.32	0.40	9.93	0.12	43.25	0.51	319.82	3.80
1981	184.10	1.99	98.92	1.07	283.02	3.06	35.32	.38	10.38	.11	45.69	.49	328.71	3.56
1982	186.32	1.92	102.44	1.05	288.76	2.97	35.41	.36	10.01	.10	45.42	.47	334.18	3.44
1983	186.30	1.80	104.81	1.01	291.11	2.82	36.49	.35	10.33	.10	46.82	.45	337.93	3.27
1984	186.99	1.66	99.73	.89	286.72	2.55	42.63	.38	11.31	.10	53.95	.48	340.66	3.03
1985	183.16	1.54	99.54	.84	282.69	2.38	42.08	.35	12.66	.11	54.74	.46	337.45	2.84
1986														
I	44.10	1.43	24.85	.81	68.96	2.24	10.42	.34	2.54	.08	12.96	.42	81.92	2.66
II	45.48	1.46	24.19	.77	69.67	2.23	11.26	.36	2.56	.08	13.82	.44	83.49	2.67
III	47.26	1.51	26.26	.84	73.52	2.35	13.15	.42	3.43	.11	16.58	.53	90.10	2.87
IV	43.93	1.39	29.22	.92	73.15	2.32	12.21	.39	5.68	.18	17.89	.57	91.04	2.88
Year	180.77	1.45	104.53	.84	285.30	2.28	47.04	.38	14.21	.11	61.25	.49	346.55	2.77
1987														
I	42.60	1.32	27.10	.84	69.70	2.15	12.07	.37	2.70	.08	14.77	.46	84.47	2.61
II	44.79	1.38	25.81	.80	70.61	2.18	11.89	.37	3.07	.09	14.97	.46	85.57	2.64
III	46.99	1.42	27.56	.83	74.55	2.26	11.85	.36	3.72	.11	15.57	.47	90.11	2.73
IV	43.74	1.29	31.05	.92	74.80	2.21	11.49	.34	5.60	.17	17.09	.50	91.89	2.71
Year	178.13	1.35	111.53	.85	289.65	2.20	47.30	.36	15.09	.11	62.39	.47	352.05	2.67
1988														
I	44.51	1.29	28.14	.82	72.64	2.11	11.56	.34	2.95	.09	14.52	.42	87.16	2.53

1/ Red meat includes beef and pork only; poultry includes broilers and turkeys only. 2/ Total includes beef, pork, broilers, and turkeys only. Totals may not add due to rounding.

for most grains, but forage prospects in many areas, while remaining low, have improved. Rains and more moderate temperatures came after the key corn pollination period, causing the production estimate to drop to 4,479 million bushels from the 5,200-million-bushel July estimate. Higher prices have reduced domestic and export demand from year-earlier levels. Beginning stocks for the 1988/89 crop year, although reduced from a year ago, are still very large. Therefore, despite the reduced corn crop, supplies should still be adequate for the 1988/89 crop year.

Prices over the next year, in addition to the normal seasonal pattern, will largely depend on replenishing subsoil moisture conditions this fall through spring harvests. World coarse grain production, outside the United States is projected to be large and planting in the Southern Hemisphere is just beginning. Stronger world prices are likely to encourage increased acreage.

Acreage reduction requirements for the 1989/90 U.S. feed grain crops must be announced by September 30. The requirement will drop from this year's 20 percent of acreage, as legislation limits the acreage reduction to no more than 12.5 percent if 1989/90 carryover stocks of corn are projected in September to be below 2 billion bushels. The August carryover stocks were estimated to drop to 1.576 billion bushels.

Moisture conditions in the High Plains winter wheat area should favor a good planting season and wheat pasture growth. Acreage reduction requirements were reduced from 27.5 percent of acreage in 1988/89 to 10 percent for the 1989/90 crop. A good fall planting season and large spring 1989 harvest could result in lower prices and increased wheat feeding next summer before the 1989/90 corn harvest.

Similar drought conditions exist for the soybean crop with further deterioration since July 1. The 1988/89 crop was estimated at 1,474 million bushels as of August 1, down 23 percent from a year ago, and 11 percent from last month's estimate. Stocks are expected to drop, but higher prices are reducing export demand so crushing supplies should remain adequate. Soybean meal prices are expected to average \$235 to \$285 a ton in 1988/89, up from \$225 in 1987/88.

Table 3--Hay acreage, production, and stocks

Item	1986	1987	1988	1988/ 1987
	1,000 acres			Per- cent
Acreage	62,419	60,748	66,153	109
	1,000 tons			
Production	155,529	149,142	130,509	88
Stocks on farms				
May 1	26,698	32,418	27,329	84
December 1	121,734	119,749		

Autumn Weather--Key to Winter Forage Supplies

Conditions improved in many areas in July, but average or better rainfall is necessary in August-October if small grain pastures and accumulated pasture and range are going to be adequate even for the low cattle inventory. Producers in many areas have already cut into or depleted their winter forage supplies. As of August 1, this year's hay crop was estimated at 130.5 million tons, down 12 percent from a year ago. The alfalfa crop is expected to decline 18 percent, while grass hays may drop 6 percent. This year's hay crop may be 10 million tons below the 1983 harvest and the smallest since 1976 when 120.1 million tons were harvested. However, in 1976 the midyear cattle inventory was 133.7 million head, 19 percent above this year's estimate. Hay supplies are likely to be particularly critical in the North Central States where production is estimated down 17 percent. Sharpest year-to-year declines were in North Dakota and Montana with a dropoff of 62 and 25 percent, respectively. The farm price of hay in mid-July was \$83.10 per ton, up from \$61.80 a year ago, and \$76.80 in June.

Pasture and range conditions were rated very poor on August 1, down 27 points from a year ago, and down 24 from the 1978-87 average. Conditions worsened in 24 States during July, primarily in the North Central and Northern Great Plains areas. This was the lowest reported condition for August 1 since 1936. However, conditions improved in 19 States. Seven States were in the extreme drought range compared with 15 States on July 1. More moisture is needed, but the fiercely

hot, dry conditions of June–July appear to have been broken.

Adding to forage supplies in the hardest-hit areas are large acreages of drought-impacted crops which may be harvested for forage to salvage at least some value. Rains may have arrived too late to help corn yields, but may increase tonnage from salvaging the crop as silage.

In addition, President Reagan signed the Drought Assistance Act of 1988 into law on August 11 which modified the Feed Emergency Program (FEP) and the Emergency Feed Assistance Program (EFAP). The FEP provides for Government sharing of 50 percent of the purchased cost of feeds up to 5 cents a pound. The EFAP enables eligible producers to receive grains from the CCC inventory at 75 percent of the county loan rate. Both programs are subject to the same eligibility requirements and limitations:

- o Livestock producers must grow their own feed.
- o The producer must be in a county that has been declared eligible for drought assistance.
- o The producer must have a 40-percent loss because of the drought.
- o The producer's gross revenue must be less than \$2.5 million.
- o Upon proof of eligibility, a producer can receive the lesser of 10 pounds of feed per day per animal unit or his computed crop loss, less the available feed he has on hand.
- o The maximum assistance is \$50,000 per year.

LIVESTOCK AND RED MEATS

Total red meat and poultry production in 1989 is expected to decline 1 percent from the record 1988 levels. Low cattle inventories, plus a plateauing of pork and turkey production will more than offset a continued rise in broiler production in 1989. This will still be the second largest meat production on record and nearly 2 percent above 1987. Next

year will mark the first time since 1982 that per capita meat consumption has not approximated or exceeded the previous year's consumption.

Cattle

Cattle Inventory Continues To Decline

The July 1 cattle and calf inventory totaled 108 million head, down 1 percent from a year earlier and the lowest midyear inventory since numbers were first collected in 1973. Both beef and dairy cow inventories fell 1 percent from 1987, while beef replacement heifers were unchanged and dairy replacement heifers were down 4 percent. The decline in cow numbers almost assures that modest declines in the all cattle inventory will continue through 1989 and possibly 1990 as well. Heifer retention would have to pick up dramatically over the next 6 months to keep inventories next January 1 from declining about 1 percent.

The midyear inventory of steers over 500 pounds and heifers not being held for herd replacement was down 2 and 4 percent respectively from a year earlier, a decline of 600,000 head. Nearly 40 percent of these

Table 4--July 1 cattle inventory

Class	1986	1987	1988	1988/87
	1,000 head			Percent change
Cattle and calves	112,200	109,500	107,900	-1.5
Cows and heifers that have calved	45,000	44,400	44,000	-.9
Beef cows	34,150	34,000	33,750	-.7
Milk cows	10,850	10,400	10,250	-1.4
Heifers 500 lb+	17,500	17,000	16,500	-2.9
For beef cow replacement	4,800	4,800	4,800	0
For milk cow replacement	4,700	4,600	4,400	-4.3
Other heifers	8,000	7,600	7,300	-3.9
Steers 500 lb+	15,300	14,800	14,500	-2.0
Bulls 500 lb+	2,200	2,200	2,200	0
Heifers, steers, and bulls -500 lb	32,200	31,100	30,700	-1.3
Calf crop 1/	41,141	40,026	40,200 2/	+ .4

1/ Number of calves born before July 1 plus the number expected to be born on and after July 1.

2/ Expected.

animals were on feed on July 1—the largest since 1973. Further declines in feeder cattle supplies may occur this fall following the recent announcement by the Government of Mexico that exports to the United States would be sharply reduced in 1988–89. Inventories of calves under 500 pounds declined 400,000 head from last July in spite of a 14-percent drop in first-half calf slaughter and a slight increase in the 1988 calf crop. In addition, 11 percent more calves were on feed July 1. Thus, smaller cattle supplies and relatively higher placements on feed have cut into the pool of cattle outside of feedlots by an additional 1.3 million head, a 3-percent decline from a year ago.

There are some signals that future cattle supplies could be larger. The number of heifers entering cow herds increased 10 percent from last year's relatively low retention rate. Heifers entering beef cow herds increased 14 percent to 2.7 million head, with dairy heifer retention nearly 1.5 million head, a 4-percent increase. The higher heifer retention was above expectations given the relatively large heifer slaughter during January–June. Heifers placed on feed in the 13 quarterly reporting States increased 5 percent from the first half of 1987, and first-half heifer slaughter was down only 3 percent from a year earlier.

While first-half heifer slaughter remained relatively large, cow slaughter fell nearly 7 percent. Beef cow slaughter, at 1.6 million head, was down 9 percent. Dairy cow slaughter for January–June totaled 1.4 million head, a 3-percent decline. There remains some uncertainty about the impact of this summer's drought on heifer retention and cow and heifer slaughter over the next two quarters. However, net returns to cow/calf producers should reach \$50 per head this year, and near that level in 1989, creating an incentive to minimize drought related culling.

Cattle on Feed Inventories Remain Large

Second-quarter fed cattle marketings from the 13 quarterly reporting States totaled nearly 5.9 million head, the largest since the spring quarter of 1978. That works out to a marketing rate of 63 percent of the cattle on feed at the beginning of the quarter. While down slightly from the past 2 years, movement through feedlots remained above any other year and more importantly, occurred at a time of record high prices.

Placements on feed during the spring quarter were slightly larger than marketings, pushing the July 1 on-feed number 4 percent above a year ago to nearly 9 million head.

Table 5—Heifers entering cow herd January–June and July–December

Year	Jan. 1 cow inven- tory	Intended herd re- place- ments Jan. 1	Total 1/ disap- pearance Jan.–June	July 1 cow inven- tory	Heifers		Intended herd re- place- ments July 1	Total 2/ disap- pearance July–Dec.	Jan. 1 cow in- ventory following year	Heifers	
					Enter- ing herd Jan.–June	Percent enter- ing				Enter- ing herd July– Dec.	Percent enter- ing
			1,000 head			Percent		1,000 head			Percent
1973	52,553	11,306	3,550	54,037	5,034	44.5	11,144	3,496	54,478	3,937	35.3
1974	54,478	12,134	3,625	57,960	6,107	50.3	11,780	4,702	56,931	4,673	39.7
1975	56,931	12,971	5,212	58,053	6,336	48.8	11,306	7,197	54,971	4,118	36.4
1976	54,971	11,148	5,628	54,938	4,595	41.2	10,475	5,811	52,441	4,314	41.2
1977	52,441	10,414	5,221	52,190	4,970	47.7	9,846	5,429	49,635	2,874	29.2
1978	49,635	9,744	4,961	48,413	3,739	38.4	9,340	4,253	47,852	3,692	39.5
1979	47,852	9,459	3,413	47,815	3,376	35.7	9,885	3,235	47,866	3,286	33.2
1980	47,866	10,101	3,304	49,941	5,379	53.3	10,214	3,748	49,622	3,429	33.6
1981	49,622	10,481	3,599	51,004	4,981	47.5	10,856	3,788	50,216	3,000	27.6
1982	50,216	11,147	3,887	49,990	3,699	33.2	10,900	4,182	48,986	3,178	29.2
1983	48,986	10,881	3,253	49,600	4,499	41.3	10,680	4,447	48,603	3,450	32.3
1984	48,603	10,715	3,859	48,700	4,661	43.5	10,450	4,782	46,174	2,293	21.9
1985	46,174	10,302	3,428	46,300	4,097	39.8	9,900	4,113	44,810	2,625	26.5
1986	44,810	9,910	3,683	45,000	4,526	45.7	9,500	4,293	44,282	3,575	39.5
1987	44,282	9,495	3,698	44,400	3,816	40.2	9,400	3,575	43,266	2,441	26.0
1988	43,266	9,266	3,463	44,000	4,197	45.3	9,200				

1/ Death loss calculated as 1 percent of January 1 cow inventory plus estimated commercial cow slaughter. 2/ Death loss calculated as 1/2 percent of January 1 cow inventory plus estimated commercial cow slaughter.

Table 6--July 1 feeder cattle supply

Item	1986	1987	1988	1988/87
	1,000 head			Percent change
Calves less than 500 lb				
On farms	32,200	31,100	30,700	-1.3
On feed 1/	183	264	292	+10.6
Total	32,017	30,836	30,408	-1.4
Steers & heifers 500 + lb 2/				
On farms	23,300	22,400	21,800	-2.7
On feed 1/	9,151	9,971	10,266	+3.0
Total	14,149	12,429	11,534	-7.2
Total supply	46,166	43,265	41,942	-3.1

1/ Estimated U.S. steers and heifers. 2/ Not including heifers for cow replacement.

Table 7--U.S. federally inspected cow slaughter by region, January-June

Standard Federal regions 1/ 2/	Beef			Dairy		
	1987	1988	1988/1987	1987	1988	1988/1987
	1,000 head		Pct.	1,000 head		Pct.
1 & 2	4.8	4.6	.958	118.6	109.7	.925
3	60.0	44.0	.733	193.8	171.6	.885
4	328.2	277.0	.844	129.3	102.0	.789
5	165.5	148.6	.898	490.9	531.3	1.082
6	422.6	393.4	.931	75.6	62.6	.828
7	426.0	422.3	.991	138.0	107.5	.779
8	114.5	99.5	.869	49.2	49.4	1.004
9	126.7	85.2	.672	153.5	171.3	1.116
10	76.5	97.7	1.227	72.5	66.6	.919
U.S. 3/	1,724.8	1,572.3	.912	1,421.4	1,372.1	.965

1/ States included in regions are: 1-ME, NH, VT, MA, CT & RI; 2-NY & NJ; 3-PA, WV, VA & DE-MD; 4-KY, TN, NC, SC, GA, AL, MS & FL; 5-MI, OH, IN, IL, WI & MN; 6-TX, OK, NM, AR & LA; 7-IA, NB, KS & MO; 8-MT, WY, CO, UT, ND & SD; 9-CA, NV, AZ & HA; 10-ID, OR, WA. 2/ Region 1 and 2 combined to avoid disclosing individual operations. 3/ Totals may not add due to rounding.

Table 8--Calf slaughter by class under Federal inspection

Year	Bob veal 150 lb & below	Fed		Other over 400 lb	Total
		Formula 150-400 lb	Nonformula 150-400 lb		
1,000 head					
1986	1618.6	1,009.3	285.9	281.0	3,194.8
1987					
Jan.	115.9	87.1	15.1	29.5	247.6
Feb.	104.5	82.2	13.3	24.7	224.7
Mar.	120.5	90.2	13.8	26.6	251.1
Apr.	89.4	86.8	15.5	23.2	214.9
May	70.0	80.7	14.4	24.0	189.1
Jun.	81.3	94.2	13.3	25.7	214.5
Jul.	101.3	80.8	12.1	26.0	220.2
Aug.	101.6	64.2	14.8	21.8	202.4
Sept.	99.4	91.0	14.0	24.2	228.6
Oct.	102.8	85.6	19.3	25.4	233.1
Nov.	103.5	70.4	12.3	25.1	211.3
Dec.	117.6	89.5	13.5	21.3	241.9
Yr	1,207.8	1,002.7	171.4	297.5	2,679.4
1988					
Jan.	92.5	82.0	12.5	18.1	205.1
Feb.	95.9	94.0	18.0	16.9	224.8
Mar.	96.3	92.8	11.4	15.3	215.8
Apr.	65.3	78.7	10.8	14.3	169.1
May	58.1	80.7	17.1	15.4	171.3
Jun.	82.1	90.4	14.2	17.1	203.8

Table 9--Commercial calf slaughter and production

Year	Slaughter	Dressed weight	Production
	1,000 head	Pounds	Million pounds
1986			
I	873	148	129
II	836	154	129
III	859	150	129
IV	839	145	122
Year	3,408	149	509
1987			
I	760	147	112
II	651	155	101
III	684	145	99
IV	720	144	104
Year	2,815	148	416
1988			
I	647	150	97
II	567	162	92

Table 10--13--States cattle on feed, placements, marketings, and other disappearance

Year	On feed 1/	Percent change 2/	Place-ments	Percent change 2/	Fed mar-ketings	Percent change 2/	Other dis-apperance	Percent change 2/
	1,000 head	Percent	1,000 head	Percent	1,000 head	Percent	1,000 head	Percent
1985								
I	10,653	7.3	5,315	-3.4	5,907	3.4	373	2.2
II	9,688	3.7	5,206	-6.5	5,787	3.0	437	-24.9
III	8,670	-.3	5,480	-12.3	5,969	5.0	244	-9.0
IV	7,937	-11.8	7,365	-3.0	5,224	-5.1	324	-22.3
Year	---	---	23,366	-6.1	22,887	1.6	1,378	-15.6
1986								
I	9,754	-8.4	5,270	-.8	5,763	-2.4	316	-15.3
II	8,945	-7.7	5,221	+.3	5,821	+.6	375	-14.2
III	7,970	-8.1	6,336	15.6	5,876	-1.6	233	-4.5
IV	8,197	3.3	6,756	-8.3	5,396	3.3	312	-3.7
Year	---	---	23,583	.9	22,856	-.1	1,236	-10.3
1987								
I	9,245	-5.1	5,680	7.8	5,747	-.3	371	17.4
II	8,807	-1.5	5,906	13.1	5,619	-3.5	428	14.1
III	8,666	+8.7	6,590	4.0	6,022	2.5	242	3.9
IV	8,992	9.7	6,698	-.9	5,583	3.5	338	8.3
Year	---	---	24,874	5.5	22,971	.5	1,379	11.6
1988								
I	9,769	5.7	5,796	2.0	5,810	1.1	390	5.1
II	9,365	6.3	5,898	-.1	5,854	4.2	418	-2.3
III	8,991	3.8			3/ 6,219	3.3		

1/ Beginning of quarter. 2/ Percent change from previous year. 3/ Expected marketings.

Table 11--Cattle on feed, placements, and marketing, 13 States

Item	1986	1987	1988	1988/87
	1,000 head			Percent change
On feed April 1	8,945	8,807	9,365	+6
Placements, Apr.-June	5,221	5,906	5,898	0
Marketings, Apr. June	5,821	5,619	5,854	+4
Other disappearance, Apr.-June	375	428	418	-2
On feed July 1	7,970	8,666	8,991	+4
Steer & steer calves				
-500 lb	118	171	189	+11
500-699 lb	379	487	540	+11
700-899 lb	1,586	1,836	1,662	-9
900-1,099 lb	2,145	2,502	2,531	+1
1,100 + lb	694	604	843	+40
Heifers & heifer calves				
-500 lb	37	52	59	+13
500-699 lb	543	501	469	-6
700-899 lb	1,483	1,543	1,540	0
900 + lb	954	935	1,115	+19
Cows	31	35	43	+23
Marketings, July-Sept.	5,876	6,022	6,219 1/	+3

1/ Intentions.

Over 50 percent of the cattle on feed July 1 weighed above 900 pounds. However, July marketings from the 7 monthly reporting States were up 4 percent from last year's record level, suggesting that most of the heavy cattle are gone. Fed cattle traded in the mid-\$60's per cwt in spite of the larger marketings and have moved into the low \$70's since then. For the third quarter, fed cattle prices will likely average \$66-\$68 in Omaha unless retail beef movement slows considerably during September. Producers indicated intentions to market 6.219 million cattle during the third quarter from the 13 quarterly reporting States, 3 percent above a year earlier. This would require a turnover rate above the past several summers; however, the record large marketings from the 7 States in July is a good start toward this goal.

Feedlot placements during the summer quarter could fall 12-14 percent from the near-record levels of a year ago. Lower feedlot profits, higher grain prices and continued tight feeder cattle supplies will make it less attractive to bid cattle off pasture. Feeder cattle are once again trading above \$80 per cwt after falling nearly \$10 in late June as drought concerns increased. Additional price weakness this fall should be

Table 12--7-States cattle on feed, placements, and marketings

Year	On feed	Percent change 1/	Net placements	Percent change 1/	Marketings	Percent change 1/	Other disappearance	Percent change 1/
	1,000 head	Percent	1,000 head	Percent	1,000 head	Percent	1,000 head	Percent
1986								
Jan.	7,920	-8.3	1,494	+12.2	1,750	-1.8	87	-26.3
Feb.	7,664	-6.4	1,128	-9.5	1,470	-4.5	92	-2.1
Mar.	7,322	-7.2	1,564	+4.7	1,593	+2.2	86	-12.2
Apr.	7,293	-6.8	1,445	+12.6	1,631	+1.7	120	-9.8
May	7,107	-5.3	1,624	+4.9	1,635	+1.9	132	+3.1
June	7,096	-4.8	1,095	-7.5	1,648	+4.5	67	-23.0
July	6,543	-7.3	1,480	+45.5	1,692	+1.3	64	+4.9
Aug.	6,331	-1.1	1,732	+19.6	1,659	-2.2	70	+12.9
Sept.	6,404	+4.0	2,044	+7.1	1,637	+2.1	59	-25.3
Oct.	6,811	+5.4	2,322	-13.8	1,587	+9	81	-4.7
Nov.	7,546	-.5	1,727	+2.2	1,447	+4.9	87	+14.5
Dec.	7,826	-.8	1,331	-2.8	1,514	+8.6	104	-6.3
1987								
Jan.	7,643	-3.5	1,464	-2.0	1,803	+3.0	127	+46.0
Feb.	7,304	-4.7	1,337	+18.5	1,478	+5	105	+14.1
Mar.	7,163	-2.2	1,630	+4.2	1,561	-2.0	89	+3.5
Apr.	7,232	-.8	1,542	+6.7	1,541	-5.5	139	15.8
May	7,233	+1.8	1,841	+13.4	1,514	-7.4	143	+8.3
June	7,560	+6.5	1,335	+21.9	1,702	+3.3	87	+29.9
July	7,193	+9.9	1,203	-18.7	1,703	+7	71	+10.9
Aug.	6,693	+5.7	1,847	+6.6	1,722	+3.8	68	-2.9
Sept.	6,818	+6.5	2,358	+15.4	1,641	-.2	71	+20.3
Oct.	7,535	+10.6	2,519	+8.5	1,690	+6.5	85	+4.9
Nov.	8,364	+10.8	1,506	-12.8	1,458	+8	103	+18.4
Dec.	8,412	+7.5	1,231	-7.5	1,577	+4.2	119	+14.4
1988								
Jan.	8,066	+5.5	1,549	+5.8	1,759	-2.4	111	-12.6
Feb.	7,856	+7.6	1,243	-7.0	1,527	+3.3	126	+20.0
Mar.	7,572	+5.7	1,727	+6.0	1,573	+8	106	+19.1
Apr.	7,726	+6.8	1,392	-9.7	1,614	+4.7	139	0
May	7,504	+3.7	2,029	+10.2	1,719	+13.5	141	-1.4
June	7,814	+3.4	1,299	-2.7	1,692	-.6	68	-21.8
July	7,421	+3.2	1,184	-1.6	1,765	+3.6	62	-12.7
Aug.	6,840	+2.2						

1/ Percent change is from previous year.

Table 13--Commercial cattle slaughter 1/ and production

Year	Steers and heifers			Cows	Bulls and stags	Total	Dressed weight	Commercial production
	Fed	Nonfed	Total					
	1,000 head						Pounds	Million pounds
1986								
I	6,509	325	6,834	1,885	165	8,884	649	5,769
II	6,702	683	7,385	2,006	181	9,572	653	6,246
III	6,745	775	7,520	1,941	191	9,652	651	6,273
IV	6,126	748	6,874	2,129	177	9,180	645	5,925
Year	26,082	2,531	28,613	7,961	714	37,288	649	24,213
1987								
I	6,511	439	6,950	1,652	163	8,765	656	5,754
II	6,477	619	7,096	1,603	179	8,878	646	5,737
III	6,945	461	7,406	1,636	181	9,223	657	6,064
IV	6,330	566	6,896	1,719	166	8,781	666	5,850
Year	26,263	2,085	28,348	6,610	689	35,647	657	23,405
1988								
I	6,577	322	6,899	1,526	150	8,575	664	5,696
II	6,751	341	7,092	1,504	164	8,760	660	5,784

1/ Classes estimated.

Table 14--Federally inspected cattle slaughter

Week ended	Cattle			Steers			Cows								
	1986	1987	1988	1986	1987	1988	Total			Dairy			Dairy/total		
							1986	1987	1988	1986	1987	1988	1986	1987	1988
Thousands															
Percent															
Jan.															
9	757	741	664	343	349	328	189	148	132	79	66	64	42	45	48
16	755	766	722	343	360	358	176	151	127	72	67	63	41	44	50
23	704	707	701	321	336	353	153	124	125	67	61	59	44	49	47
30	669	673	673	308	332	340	143	128	117	62	64	56	43	50	48
Feb.															
6	655	674	644	307	316	335	144	135	114	64	67	57	44	50	50
13	651	621	636	310	303	332	122	119	103	58	59	53	48	50	51
20	638	602	637	289	292	316	126	109	118	59	55	59	47	50	50
27	676	657	640	318	326	317	136	121	121	64	65	58	47	54	48
Mar.															
5	637	678	618	297	337	307	130	127	115	62	67	57	48	53	50
12	638	646	609	304	311	298	128	124	105	61	58	54	48	47	52
19	646	624	622	305	300	312	131	111	106	61	55	54	47	49	51
26	641	616	607	295	303	304	135	116	108	64	58	53	47	50	49
Apr.															
2	669	652	617	315	328	315	157	121	106	89	57	51	57	47	48
9	716	649	600	354	333	300	148	114	101	97	51	50	65	45	50
16	705	681	619	339	349	315	137	119	110	86	52	54	63	44	49
23	719	639	670	342	330	349	159	117	108	92	48	49	58	41	45
30	719	635	674	334	321	356	157	118	109	84	48	50	53	41	46
May															
7	706	631	664	327	309	358	149	116	105	77	46	47	52	40	45
14	731	700	663	339	348	344	156	124	108	74	50	47	47	37	44
21	729	695	682	334	355	348	158	131	118	77	49	48	49	37	41
28	643	613	689	310	308	355	136	107	125	64	43	52	47	40	42
June															
4	720	680	575	364	351	298	142	117	96	66	50	39	46	43	41
11	735	669	681	375	340	336	143	115	121	66	49	51	46	43	42
18	691	649	678	327	320	338	140	123	129	65	49	53	46	40	41
25	731	680	677	343	339	344	147	129	120	69	52	50	47	40	42
July															
2	612	621	682	289	316	348	123	109	119	59	47	50	48	43	42
9	734	652	609	342	338	306	149	114	108	74	51	51	50	45	48
16	746	682	724	354	339	341	163	128	135	75	53	62	46	41	46
23	732	672	691	346	333	360	151	121	116	71	51	55	47	42	47
30	685	676	694	310	339	346	148	123	112	75	56	57	51	46	51
Aug.															
6	723	694		339	335		141	123		71	58		50	47	
13	767	713		361	354		150	124		78	58		52	47	
20	733	692		341	336		147	129		71	63		48	49	
27	718	706		333	341		146	132		74	66		51	50	
Sept															
3	619	690		291	324		116	119		55	54		47	45	
10	734	624		332	296		134	100		59	44		44	44	
17	722	729		352	336		145	124		66	53		46	43	
24	678	677		337	312		143	123		63	57		44	46	
Oct.															
1	694	684		359	324		134	116		62	53		46	46	
8	686	690		342	340		137	120		64	53		47	44	
15	690	696		318	338		150	128		66	55		44	43	
22	688	676		322	319		152	136		61	57		40	42	
29	696	664		325	315		165	140		66	59		40	42	
Nov.															
5	714	649		335	311		165	140		68	58		41	41	
12	671	643		296	301		168	135		73	56		43	41	
19	692	648		313	308		175	141		70	57		40	40	
26	594	576		281	280		133	109		53	46		40	42	
Dec.															
3	685	646		298	305		174	138		74	58		43	42	
10	676	660		302	311		175	140		71	60		41	43	
17	691	639		315	324		170	115		73	51		44	44	
24	512	482		248	242		105	80		46	39		44	49	
31	577	561		274	291		130	86		62	41		48	48	

1/ Corresponding dates to 1988: 1986, Jan. 11; 1987, Jan. 10.

Table 15--Beef, Choice Yield Grade 3: Retail, carcass, and farm values, spreads, and farmers' share

Year	Retail price 1/	Gross carcass value 2/	By-product allowance 3/	Net carcass value 4/	Gross farm value 5/	By-product allowance 6/	Net farm value 7/	Farm retail-spread			
								Total	Carcass-retail	Farm-carcass	Farmers' share 8/
Cents per pound								Percent			
1982	242.5	152.8	2.1	150.7	155.5	15.0	140.5	102.0	91.8	10.2	58
1983	238.1	147.4	2.0	145.4	151.8	15.6	136.2	101.9	92.7	9.2	57
1984	239.6	150.6	3.0	147.6	158.6	18.6	140.0	99.6	92.0	7.6	58
1985	232.6	137.0	1.8	135.2	142.2	15.4	126.8	105.8	97.4	8.4	55
1986	230.7	134.3	1.2	133.1	140.0	15.6	124.4	106.3	97.6	8.7	54
1987	242.5	146.7	1.4	145.3	157.6	19.7	137.9	104.6	97.2	7.4	57
I	234.6	138.4	1.4	137.0	147.9	17.6	130.3	104.3	97.6	6.7	56
II	243.2	157.6	1.5	156.1	167.8	20.0	147.8	95.4	87.1	8.3	61
III	246.4	146.9	1.4	145.5	157.8	20.1	137.7	108.7	100.9	7.8	56
IV	245.9	144.2	1.5	142.7	156.9	21.0	135.9	110.0	103.2	6.8	55
1988											
Jan.	242.9	146.5	1.8	144.7	158.8	22.2	136.6	106.3	98.2	8.1	56
Feb.	246.3	149.9	1.7	148.3	166.0	22.8	143.2	103.1	98.0	5.1	58
Mar.	248.5	155.8	1.8	154.0	173.1	24.5	148.6	99.9	94.5	5.5	60
I	245.9	150.7	1.7	149.0	166.0	23.2	142.8	103.1	96.9	6.2	58
Apr.	250.2	158.4	1.7	156.7	176.7	24.3	152.4	97.7	93.4	4.3	61
May	253.2	168.0	1.8	166.2	181.9	23.3	158.6	94.6	87.0	7.6	63
June	259.9	160.1	1.9	158.2	170.1	22.0	148.1	111.8	101.6	10.1	57
II	254.4	162.2	1.8	160.4	176.2	23.2	153.0	101.4	94.0	7.3	60

1/ Estimated weighted-average of BLS prices of retail cuts from Choice Yield Grade 3 carcass. 2/ Value of carcass-quantity equivalent to 1 lb of retail cuts. A wholesale-carcass equivalent of 1.476 is used. 3/ Portion of gross carcass value attributed to fat and bone trim. 4/ Gross carcass value minus carcass by-product allowance. 5/ Market value to producer for 2.4 lb of live animal, equivalent to 1 lb of retail cuts. 6/ Portion of gross farm value attributed to edible and inedible by-products. 7/ Gross farm value minus farm by-product allowance. 8/ Percent net farm value is of retail price.

moderate as expectations of relatively strong slaughter cattle prices later this winter and next spring lend support to the market. There may also be some positive impacts from the drought. Lack of forage this summer and early movement of cattle off grass could minimize the bunching of feeder cattle marketed this fall. In addition, Corn Belt grain producers may be in the market for stocker cattle as they attempt to salvage drought-damaged corn by chopping and feeding it.

If summer feedlot placements fall to 5.5 million head, fourth-quarter fed cattle marketings in the 13 reporting States would drop nearly 750,000 head from the summer quarter and 3 percent below the previous year. Cow slaughter is expected to pick up seasonally during the remainder of the year, but remain near a year earlier at 3.2 to 3.3 million head. This would push fourth-quarter beef production down 6 percent from 1987 to

5.4 to 5.5 billion pounds and certainly bodes well for higher cattle prices.

Retail Beef Prices Record High

Tight fed beef supplies this past spring led to record high cattle prices in May. By mid-June, larger supplies had forced cattle prices sharply lower but Choice retail beef prices continued to move higher, hitting a record \$2.60 per pound in June. The previous record was in June 1982 at \$2.54. The widening farm-to-retail spread reduced the share of the retail dollar going to producers to 57 cents, a 6-percent drop from May. A similar pattern occurred last summer except that the producer share had not reached such high levels the previous spring. For consumers, the higher retail prices are partially offset by recent changes toward higher valued cuts that contain less bone and fat in the package.

Change in the Beef Carcass-to-Retail Conversion Factor for 1987

As indicated in the special article, "Beef Carcass-to-Retail Conversion Factor Changed," in the February 1988 *Livestock and Poultry Situation and Outlook Report*, the carcass-to-retail conversion factor will be reestimated for each calendar year as data become available. The new conversion factor for 1987 (and for later years unless a change is indicated when reexamined) is 0.71. This conversion factor was 0.74 from 1962 to 1985, but with the introduction of trimming fat to one-quarter inch or less, the conversion factor declined to 0.73 in 1986.

The new conversion factor (0.71) has been used to revise the per capita retail weight disappearance (consumption) estimates in the Supply and Utilization data in this issue. This significant change is mainly the result of trimming fat to much reduced levels before retail sale in 1987 relative to earlier years. An important source of information used to recompute the 1987 conversion factor was the Texas A&M National Beef Market Basket Survey taken in late 1987 and early 1988 in 12 cities across the United States. 1/

This change in the conversion factor decreases the estimate of retail weight disappearance (consumption) 2.1 pounds for 1987. It may not have affected the actual amount of beef ingested very much as in many cases the fat and bone now removed before retail sale may have been left in a pan as grease or left on the plate as table scraps by the consumer. The conversion factor does indicate that the consumer did receive more lean beef per pound of product purchased.

1/ Savell, J.W., H.R. Cross, D.S. Hale and Lisa Beasley. *National Beef Market Basket Survey*, Meat Research Brief, Texas A&M University, College Station, Texas, 1988, 14 pages.

Increased fed cattle marketings will keep the farm-to-retail spread wide during the summer quarter. Later this fall, competition for a reduced supply of finished cattle will force packers to bid higher prices and begin to shrink packer and retailer spreads. Meanwhile, tight feeder cattle supplies could keep feedlot margins relatively narrow as feeders bid much of their profits into the purchase price of replacement cattle. Thus, there remains some risk that next year's feedlot profits will be smaller in spite of expected increases in slaughter cattle prices. Finally, the beef sector still will have to compete for consumer expenditures against large supplies of pork and poultry.

1989 Production To Drop; Prices Rise

Fed beef production is expected to decline about 6 percent in 1989 as feedlot marketings drop to the lowest level since 1980-81. Cow slaughter could decline another 2 to 3 percent, but an aging herd likely will keep slaughter near 13 to 15 percent of the January 1 inventory. Nonfed steer and heifer slaughter should remain near to slightly below this year's 1.2 to 1.3 million head. The sharpest year-to-year declines are expected next spring and summer when total beef production could drop 6 to 8 percent.

Cattle prices may reach record highs next year, particularly in the spring and early summer when supplies of fed cattle are expected to be tightest. For the year, prices for fed steers at Omaha may average in the low to mid-\$70's, compared with 1988's expected range of \$68-\$71 and nearly \$20 per cwt above 1985-86. Utility cow prices also are expected to move slightly higher as nonfed beef supplies continue to tighten. However, supplies of imported beef and the ability to substitute between cow beef and other processing meats likely will keep cow prices within \$1 to \$2 of the \$46-\$48 average price expected for 1988.

Table 16--Corn Belt cattle feeding: Selected costs at current rates 1/

Purchased during: Marketed during:	Oct. 87 Apr. 88	Nov. May	Dec. June	Jan. July	Feb. Aug.	Mar. Sept.	Apr. Oct.	May Nov.	June Dec.	July Jan.
Expenses: (\$/head)										
600 lb feeder steer	462.00	477.00	473.40	510.00	501.00	511.20	519.00	497.28	464.28	474.48
Transportation to feedlot-400 mile	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28
Corn (45 bu)	68.85	72.45	76.95	78.30	81.90	82.35	84.15	87.30	108.45	130.95
Silage (1.7 tons)	26.19	27.43	28.84	29.38	30.76	31.54	31.04	31.64	36.47	48.86
Protein supplement (270 lb)	34.43	34.43	34.43	37.26	37.26	37.26	35.91	35.91	35.91	44.28
Hay (400 lb)	9.40	9.80	10.20	10.40	10.90	11.40	10.80	10.80	11.40	17.20
Total feed costs	138.86	144.10	150.42	155.34	160.82	162.55	161.90	165.65	192.23	241.29
Labor (4 hours)	15.72	15.72	15.72	15.72	15.72	15.72	15.72	15.72	15.72	15.72
Management (1 hr.) 2/	7.86	7.86	7.86	7.86	7.86	7.86	7.86	7.86	7.86	7.86
Vet Medicine 3/	5.32	5.32	5.32	5.35	5.35	5.35	5.44	5.44	5.44	5.56
Interest on purchase (6 months)	25.18	26.00	25.80	27.03	26.55	27.09	28.03	26.85	25.07	27.28
Power, equip., fuel, shelter, deprec. 3/	24.81	24.81	24.81	24.94	24.94	24.94	25.38	25.38	25.38	25.91
Death loss (1% of purchase)	4.62	4.77	4.73	5.10	5.01	5.11	5.19	4.97	4.64	4.74
Transportation (100 miles)	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31
Marketing expenses	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35
Miscellaneous and indirect costs 3/	10.73	10.73	10.73	10.79	10.79	10.79	10.98	10.98	10.98	11.21
Total	706.05	727.26	729.74	773.07	768.98	781.56	790.44	771.08	762.55	824.99
Selling price required to cover: (\$/cwt)										
Feed and feeder cost (1050 lb)	57.23	59.15	59.41	63.37	63.03	64.17	64.85	63.14	62.53	68.17
All costs (1050 lb)	67.24	69.26	69.50	73.63	73.24	74.43	75.28	73.44	72.62	78.57
Feed cost per 100 lb gain (450 lb)	30.86	32.02	33.43	34.52	35.74	36.12	35.98	36.81	42.72	53.62
Choice steers, Omaha (900-1100 lb)	70.71	75.15	70.58	65.96						
Net margin	3.47	5.89	1.08	-7.67						
Prices:										
Feeder steer, Choice (600-700 lb) \$/cwt										
Kansas City \$/cwt	77.00	79.50	78.90	85.00	83.50	85.20	86.50	82.88	77.38	79.08
Corn \$/bu 4/	1.53	1.61	1.71	1.74	1.82	1.83	1.87	1.94	2.41	2.91
Hay \$/ton 4/	47.00	49.00	51.00	52.00	54.50	57.00	54.00	54.00	57.00	86.00
Corn silage \$/ton 5/	15.41	16.14	16.97	17.28	18.09	18.56	18.26	18.61	21.46	28.74
Protein supplement (32-36%) \$/cwt	12.75	12.75	12.75	13.80	13.80	13.80	13.30	13.30	13.30	16.40
Farm labor \$/hour	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93
Interest rate, annual	10.90	10.90	10.90	10.60	10.60	10.60	10.80	10.80	10.80	11.50
Transportation rate \$/cwt. per 100 mile	.22	.22	.22	.22	.22	.22	.22	.22	.22	.22
Mktg. expenses \$/cwt 8/	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35
Index of prices paid by farmers (1910-14=100)	1132	1132	1132	1138	1138	1138	1158	1158	1158	1182

1/ Represents only what expenses would be if all selected items were paid for during the period indicated. The feed ration and expense items do not necessarily coincide with experience of individuals for management, production, and locality of operation. 2/ Assumes 1 hour at twice the labor rate. 3/ Adjusted quarterly by the index of prices paid by farmers for commodities, services, interest, taxes, and wage rates. 4/ Average price received by farmers in IA and IL. 5/ Price derived from an equivalent price of 5 bushels corn and 330 lb hay. 6/ Average price paid by farmers in IA and IL. 7/ Converted from cents/mile for a 44,000-lb haul. 8/ Yardage plus commission fees at a Midwest terminal market.

Table 17--Great Plains custom cattle feeding: Selected costs at current rates 1/

Purchased during: Marketed during:	Oct. 87 Apr. 88	Nov. May	Dec. June	Jan. July	Feb. Aug.	Mar. Sept.	Apr. Oct.	May Nov.	June Dec.	July Jan.
Expenses: (\$/head)										
600 lb feeder steer	453.78	443.04	448.50	481.32	503.52	495.66	487.86	487.50	455.70	466.02
Transportation to feedlot (300 miles)	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96
Commission	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Feed										
Milo (1500 lb) 2/	51.60	52.95	53.40	54.15	54.75	55.65	54.45	55.65	77.85	78.45
Corn (1500 lb) 2/	58.65	59.85	62.55	63.60	64.65	66.45	65.25	66.90	87.90	88.95
Cotton seed meal (400 lb)	55.60	55.60	55.60	52.40	52.40	52.40	48.80	48.80	48.80	57.60
Alfalfa hay (800 lb)	43.20	45.60	46.80	46.00	46.80	46.40	48.40	41.60	42.00	48.40
Total feed cost	209.05	214.00	218.35	216.15	218.60	220.90	216.90	212.95	256.55	273.40
Feed handling and management charge	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00
Vet medicine	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Interest on feeder and 1/2 feed	30.01	29.56	29.98	30.94	32.17	31.82	31.31	31.18	30.66	30.89
Death loss (1.5% of purchase)	6.81	6.65	6.73	7.22	7.55	7.43	7.32	7.31	6.84	6.99
Marketing 3/	F.o.b.	F.o.b.	F.o.b.	F.o.b.	F.o.b.	F.o.b.	F.o.b.	F.o.b.	F.o.b.	F.o.b.
Total	730.61	724.21	734.51	766.59	792.81	786.78	774.34	769.91	780.70	808.26
Selling price required to cover: 4/ \$/cwt										
Feed and feeder cost (1056 lb)	62.77	62.22	63.15	66.05	68.38	67.86	66.74	66.33	67.45	70.02
All costs	69.19	68.58	69.56	72.59	75.08	74.51	73.33	72.91	73.93	76.54
Selling price 5/	73.96	76.06	71.31	66.88						
Net margin	4.77	7.48	1.75	-5.71						
Cost per 100 lb Gain:										
Variable cost										
less interest \$/cwt	47.97	48.93	49.82	49.47	50.03	50.47	49.64	48.85	57.48	60.88
Feed costs \$/cwt	41.81	42.80	43.67	43.23	43.72	44.18	43.38	42.59	51.31	54.68
Prices:										
Choice feeder steer										
600-700 lb Amarillo	75.63	73.84	74.75	80.22	83.92	82.61	81.31	81.25	75.95	77.67
Transportation rate \$/cwt/100 miles 6/	.22	.22	.22	.22	.22	.22	.22	.22	.22	.22
Commission fee \$/cwt	.50	.50	.50	.50	.50	.50	.50	.50	.50	.50
Milo \$/cwt	3.29	3.38	3.41	3.46	3.50	3.56	3.48	3.56	5.04	5.08
Corn \$/cwt	3.76	3.84	4.02	4.09	4.16	4.28	4.20	4.31	5.71	5.78
Cottonseed Meal (41%) \$/cwt 7/	13.90	13.90	13.90	13.10	13.10	13.10	12.20	12.20	12.20	14.40
Alfalfa hay \$/ton 8/	78.00	84.00	87.00	85.00	87.00	86.00	91.00	74.00	75.00	91.00
Feed handling and management \$/ton	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Interest, annual rate 9/	10.75	10.75	10.75	10.50	10.50	10.50	10.50	10.50	10.50	10.25

1/ Represents only what expenses would be if all selected items were paid for during the period indicated. The feed ration and expense items do not necessarily coincide with experience of individual feedlots. For individual use, adjust expenses and prices for management, production level, and locality of operation. Steers are assumed to gain 500 lb in 180 days at 2.8 lb per day with feed conversion of 8.4 lb per pound gain. 2/ Texas Panhandle elevator price plus \$.15/cwt handling and transportation to feedlots. 3/ Most cattle sold f.o.b. at the feedlot with 4-percent shrink. 4/ Sale weight 1,056 lb (1,100 lb less 4-percent shrink). 5/ Choice slaughter steers, 900-1100 lb, Texas-New Mexico direct. 6/ Converted from cents per mile for a 44,000-lb haul. 7/ Average prices paid by farmers in Texas. 8/ Average price received by farmers in Texas plus \$30/ton handling and transportation to feedlots. 9/ Prime rate plus 2 points.

U.S. Beef Trade

U.S. Beef Imports

U.S. beef imports are forecast to be 2,350 million pounds, carcass weight, in 1988 and 2,200 million pounds in 1989. The 1988 imports are 4 percent higher than the year before. Several factors prompted the larger imports. The 1988 trigger level for meat under the Meat Import Law was increased from 1,440 to 1,525 million pounds, product weight. Because of voluntary restraint agreements negotiated last year when it looked as if imports might trigger the Meat Import Law, beef was put in bonded warehouses at the end of the year and not released until early in 1988.

U.S. imports continued heavy in the first half of 1988. Australian cattle slaughter increased in response to drought conditions there. The increased supplies were marketed in the United States, taking advantage of favorable exchange rates. However, U.S. imports from Australia are expected to taper off as the year progresses. The dry conditions in Australia have abated, slaughter is down, and exchange rates have not continued as favorable. With the announced liberalization of the Japanese market, more meat from Australia as well as the United States is expected to be purchased by Japan, easing the pressure on the Australians to ship beef to the United States.

U.S. imports are forecast to decline 6 percent next year. Australian producers likely will continue to hold back some cattle from

Table 18--U.S. meat imports subject to Meat Import Law 1/, product weight

Country or area	Annual 1987	January-May		Percent change
		1987	1988	
	Million pounds			Percent
Australia	743.3	291.6	415.2	+42.4
New Zealand	453.3	209.2	231.3	+10.6
Canada	156.0	70.6	59.8	-15.3
Other	136.3	49.5	52.9	+6.9
Total	1,488.9	620.8	759.2	+22.3

1/ Includes fresh, chilled, and frozen beef, veal, mutton and goat meat. Data may not add due to rounding. Percent change calculated from unrounded data.

slaughter to rebuild herds and Australian shipments to Japan probably will increase.

U.S. Beef Exports Rising

U.S. beef exports are forecast to reach 620 million pounds in 1988 and 670 million pounds in 1989. Beef exports were high in 1986 and 1987 because of increased shipments to Japan and shipments of meat mandated by the Food Security Act of 1985 which went mainly to Brazil. The beef for Brazil was shipped during the last two quarters of 1986 and the first three quarters of 1987. The heavy U.S. beef exports during the fourth quarter of 1987 were the result of an announced increase in the Japanese quota and an increase in nonquota meat exports. Because a considerable portion of the announced 60,000-metric-ton increase in the Japanese quota is expected to be shipped during the third and fourth quarters of 1988, the forecast for U.S. beef exports has been increased for 1988.

U.S. beef exports are forecast to continue increasing to Japan with the additional increases in the quota during the transition period leading toward liberalization of the Japanese market.

Table 19--U.S. beef trade, carcass weight 1/

Country or area	Annual 1987	January-May		Percent change
		1987	1988	
	Million pounds			Percent
Imports				
Australia	993.0	387.7	548.4	+41.5
New Zealand	600.9	279.1	306.9	+10.0
Canada	182.6	80.9	68.6	-15.2
Brazil	100.4	21.6	38.4	+78.0
Argentina	189.1	89.5	74.3	-17.0
Central America	138.4	49.1	51.3	+4.4
Other	64.9	24.0	27.2	+13.2
Total	2,269.3	931.9	1,115.1	+19.7
Exports				
Japan	396.7	146.1	181.0	+23.9
Canada	30.9	10.3	15.9	+54.0
Caribbean	21.6	8.3	9.0	+8.5
Brazil	66.1	24.6	--	-100.0
Other	88.7	26.9	31.2	+15.7
Total	604.0	216.2	237.0	+9.6

1/ Data may not add due to rounding. Percent change calculated from unrounded data.

U.S. imports of live cattle come mainly from Mexico and Canada. The supply from Mexico, the major market, is affected by economic policy considerations and the estimate for exports can change dramatically over the year. Mexico has a export quota on live cattle for the September–August year. This quota is based on a number of factors, primarily the availability of meat and meat prices in Mexico City. This past year, the very sensitive cattle export quota announcement was delayed for several months because of the election, while later the quota was increased because of drought in Mexico. At present, with apparent meat shortages and efforts to keep meat prices down to levels set in inflation control programs, the export tariffs on cattle have been raised and export licenses cancelled.

If Mexico does not permit cattle exports for the remainder of the marketing year and delays announcement of next year's quota until December, as has been reported, total U.S. cattle imports during 1988 could fall from the estimated 1.5 million head to about 1.1 million. For 1989, if Mexico's domestic meat situation is not stabilized, the announced quota could be lower than this year. Preliminary information from Mexico indicates it could be as low as 500,000 head.

Table 20--U.S. live cattle trade 1/

Country or area	Annual 1987	January–May		Percent change
		1987	1988	
		1,000 head		Percent
Imports				
Mexico	937.9	514.3	727.0	+41.3
Canada	262.1	118.1	173.1	+46.6
Other	.5	.3	.4	+44.6
Total	1,200.5	632.7	900.5	+42.3
Exports				
Mexico	48.0	15.8	12.9	-18.6
Canada	33.3	9.9	7.0	-29.2
Other	49.4	17.0	17.7	+3.9
Total	130.7	42.7	37.5	-12.1

1/ May not add due to rounding. Percent change calculated from unrounded data.

Second-quarter lamb and mutton production was 80 million pounds, 7 percent above a year earlier. This raises first-half 1988 production 9 percent from first-half 1987 production. Prices for slaughter lambs at San Angelo averaged \$69.52 during second-quarter 1988, down from \$81.51 in the first quarter. The drop in lamb prices largely reflects packers' discounting of heavy-weight carcasses. June average dressed weights were 63 pounds, up 9 percent from a year ago. The decline also reflects the drop in wholesale prices due to increased supplies. These prices followed a drop in the wholesale lamb carcass price from \$156.88 in January 1988 to \$124.00 in June. This is an indication of the amount of price reduction necessary to move increased production in the retail market once the hotel, restaurant, and institutional trade is saturated.

Second-half lamb and mutton production is expected to be about 3 percent above 1987. Third-quarter output is expected to be about 80 million pounds, with the fourth quarter at about 83 million pounds. Prices for slaughter lambs at San Angelo are expected to average in the low \$60's for the second half of the year as production increases. Preliminary July slaughter lamb prices averaged under \$60.

Lamb and mutton production is expected to increase about 2 to 3 percent in 1989. The

Table 21--Commercial sheep and lamb slaughter 1/ and production

Year	Lambs	Sheep	Total	Dressed weight	Production
	1,000 head			Pounds	Mil lb
1986					
I	1,438	72	1,510	60	90
II	1,246	97	1,343	58	78
III	1,324	80	1,404	58	81
IV	1,306	72	1,378	60	82
Year	3,514	321	5,635	59	331
1987					
I	1,213	57	1,270	60	76
II	1,211	79	1,290	58	75
III	1,241	75	1,316	59	77
IV	1,253	70	1,323	61	81
Year	4,918	281	5,199	59	309
1988					
I	1,292	62	1,354	63	85
II	1,177	82	1,259	64	80

1/ Classes estimated.

Table 22--U.S. Lamb and Mutton imports, carcass weight 1/

Country or area	Annual 1987	January-May		Percent change
		1987	1988	
	Million pounds			Percent
Lamb				
Australia	20.7	9.2	9.4	+1.8
New Zealand	8.0	2.3	4.8	+105.0
Other	.1	.1	.1	+2.6
Total	28.7	11.6	14.3	+22.4
Mutton				
Australia	13.4	8.4	14.4	+71.8
Other	.2	.1	.2	+67.2
Total	13.6	8.5	14.6	+71.7

1/ May not add due to rounding. Percent change on unrounded data.

heaviest production is expected to occur in the first quarter to coincide with the spring religious holidays. Prices for slaughter lambs in 1989 are expected to be lower than this year, averaging in the mid \$60's. The prices also will be affected by the ability of producers to lower slaughter weights and consumers' willingness to purchase relatively expensive lamb with large supplies of other meats.

Lamb and Mutton Imports Up

U.S. imports of lamb and mutton are forecast to reach 58 million pounds, carcass weight, in 1988 and 60 million pounds in 1989. For the first 5 months in 1988 most of the increase has been in mutton imports. Mutton is an inexpensive meat that is used mainly in processing. With the possibility of reduced availability of processing type beef next year, increased imports of mutton are likely. The countervailing duty deposit rate on lamb imported from New Zealand has been changed from NZ\$.36 per pound to 4.55 percent of the f.o.b. invoice price (roughly NZ\$.06 per pound). Some increase in lamb from New Zealand is likely but most of the increase in lamb imports is expected to come from Australia.

Hogs

Breeding Inventories May Peak in 1988

The number of hogs kept for breeding on U.S. farms increased rapidly during the first half of 1988, extending a herd buildup that began in mid-1986. The June 1, 1988,

breeding inventory of 7.5 million head was the largest since 1983. However, drought conditions brought a sharp reduction in producers' returns, and excessive heat and humidity caused farrowing and conception problems in late spring and early summer. These developments, along with prospects for negative returns this fall, likely will result in a decline in the breeding herd by the end of the year. The December 1, 1988, breeding inventory could be about the same as a year earlier.

Sow slaughter data indicate that some herd liquidation probably took place in June and July. Further liquidation is likely in the fourth quarter as returns deteriorate, though extensive cutbacks are not expected. Emergency feed-assistance programs and higher prices for deferred futures contracts, should they persist, may encourage some producers to maintain herds.

Fourth-Quarter Hog Prices To Be Weak

Barrow and gilt prices only managed to hold steady through mid-summer, in contrast to the usual uptrend, with bids at the 7 major markets hovering near \$45 per cwt. Hog slaughter during this period was about 12 percent larger than a year ago. Cold storage stocks, which were up 80 percent (carcass-weight basis) on July 1, added significantly to total pork supplies. For the quarter, commercial slaughter is expected to be up 12 percent at 21.7 million head. The 7-market average price of barrows and gilts is expected to be \$43-45 per cwt, compared with \$59 a year ago.

With weekly kills under Federal inspection projected to rise from 1.5 million in mid-summer to 1.8 million in September, hog prices are likely to decline at the end of the third quarter. Prices may continue downward until slaughter reaches a seasonal peak in November.

As the large spring pig crop comes to market, augmented by breeding herd liquidation, commercial pork production could reach 4.35 billion pounds in the fourth quarter, 7 percent above a year earlier. Barrow and gilt prices may average \$37-43 at the 7 major markets, down from \$44 in 1987. As in 1987, the spread between hog prices and wholesale pork prices is expected to be relatively wide in

Table 23--Federally inspected hog slaughter

Week ended	1986	1987	1988
Thousands			
Jan.			
9	1,675	1,683	1,717
16	1,654	1,659	1,766
23	1,563	1,527	1,605
30	1,506	1,500	1,543
Feb.			
6	1,526	1,455	1,535
13	1,512	1,502	1,544
20	1,501	1,395	1,542
27	1,606	1,533	1,595
Mar.			
5	1,635	1,556	1,600
12	1,650	1,578	1,674
19	1,556	1,574	1,639
26	1,579	1,504	1,631
Apr.			
2	1,518	1,529	1,599
9	1,633	1,553	1,573
16	1,651	1,468	1,655
23	1,619	1,393	1,659
30	1,637	1,453	1,695
May			
7	1,607	1,475	1,653
14	1,560	1,440	1,633
21	1,518	1,448	1,577
28	1,310	1,232	1,533
June			
4	1,471	1,385	1,323
11	1,459	1,372	1,489
18	1,373	1,341	1,513
25	1,330	1,356	1,510
July			
2	1,118	1,193	1,537
9	1,390	1,360	1,330
16	1,349	1,345	1,537
23	1,281	1,354	1,543
30	1,314	1,334	1,456
Aug.			
6	1,338	1,372	
13	1,369	1,445	
20	1,402	1,404	
27	1,419	1,475	
Sept.			
3	1,257	1,548	
10	1,492	1,363	
17	1,504	1,671	
24	1,504	1,621	
Oct.			
1	1,521	1,658	
8	1,555	1,640	
15	1,528	1,720	
22	1,551	1,664	
29	1,580	1,763	
Nov.			
5	1,576	1,792	
12	1,537	1,778	
19	1,557	1,772	
26	1,308	1,463	
Dec.			
3	1,530	1,845	
10	1,548	1,879	
17	1,503	1,728	
24	1,069	1,150	
31	1,258	1,458	

1/ Corresponding dates to 1988: 1986, January 11; 1987, January 10.

the fall. A 5-percent reduction in turkey output may be a supportive influence, but ham stocks may be nearly twice as large as a year earlier. Likewise, storage demand for fresh pork should be strong as long as premiums in deferred futures prices are maintained. However, it is doubtful that storage activity will exceed the unusually brisk pace of a year earlier.

Pork Supplies May Decline in 1989

Per capita pork supplies in 1989 are expected to be 64 to 66 pounds on a retail-weight basis, down 1-3 percent from 1988. Annual increases in the first half of the year are likely to be overshadowed by declines in the second half. Commercial pork production may be down 1 percent, while imports fall 6 percent and exports fall 10 percent.

Pork production is likely to continue about 3 percent above a year earlier in the first quarter, owing to an increase in the summer 1988 pig crop. June-August 1988 farrowings are probably below June 1 indications, but still greater than a year earlier, since these sows were bred in the spring. September-November 1988 farrowings, however, could be substantially lower than the 7-percent increase indicated in June. As a result, second-quarter 1989 pork production is expected to be about the same as in 1988.

Third- and fourth-quarter 1989 pork production will be directly linked to the amount of herd liquidation in the second half of 1988. Moderate liquidation is anticipated, resulting in a 3-percent annual decline in second-half 1989 production. Commercial hog slaughter is projected to be near 21.1 million head in the third quarter, down 2 percent from the previous year, while the fourth-quarter kill could decline 5 percent to 23.3 million.

Hog Prices To Rise in 1989

Hog prices are expected to rise in 1989. While first-quarter prices may be close to those of a year earlier, the rest of 1989 is expected to show a distinctly stronger price structure. Though production declines may not surface until the second half of the year, tighter beef supplies and anticipation of

Table 24--Pork: Retail, wholesale, and farm values, spreads, and farmers' share

Year	Retail price 1/	Wholesale value 2/	Gross farm value 3/	By-product allowance 4/	Net farm value 5/	Farm-retail spread		Farmers' share 6/	
						Total	Wholesale-retail wholesale		
Cents per pound									Percent
1982	175.4	121.8	94.3	6.3	88.0	87.4	53.6	33.8	50
1983	169.8	108.9	81.4	4.9	76.5	93.3	60.9	32.4	45
1984	162.0	110.1	83.3	5.9	77.4	84.6	51.9	32.7	48
1985	162.0	101.1	76.2	4.8	71.4	90.6	60.9	29.7	44
1986	178.4	110.9	87.3	4.9	82.4	96.0	67.5	28.5	46
1987	188.4	113.0	87.9	5.2	82.7	105.7	75.4	30.3	44
I	185.0	103.8	81.8	5.0	76.8	108.2	81.2	27.0	41
II	183.4	116.6	95.6	5.5	90.1	93.3	66.8	26.5	49
III	195.5	124.3	100.3	5.9	94.4	101.1	71.2	29.9	48
IV	189.7	107.4	74.0	4.3	69.7	120.0	82.3	37.7	37
1988									
Jan.	185.3	104.0	75.9	4.6	71.3	114.0	81.3	32.7	38
Feb.	183.1	105.3	80.3	4.8	75.5	107.6	77.8	29.8	41
Mar.	183.3	103.5	72.9	4.3	68.6	114.7	79.8	34.9	37
I	183.9	104.3	76.4	4.6	71.8	112.1	79.6	32.5	39
Apr.	182.9	102.5	71.4	4.2	67.2	115.7	80.4	35.3	37
May	183.6	106.4	80.8	4.7	76.1	107.5	77.2	30.3	41
June	187.9	106.3	81.7	4.9	76.8	111.1	81.6	29.5	41
II	184.8	105.1	78.0	4.6	73.4	111.4	79.7	31.7	40

1/ Estimated weighted-average of BLS prices of retail cuts from pork carcass. 2/ Value of wholesale quantity equivalent to 1 lb of retail cuts. A wholesale-carcass equivalent of 1.06 is used. 3/ Market values to producer for 1.7 lb of live animal, equivalent to 1 lb of retail cuts. 4/ Portion of gross farm value attributable to edible and inedible by-products. 5/ Gross farm value minus by-product allowance. 6/ Percent net farm value is of retail price.

Table 25--Commercial hog slaughter 1/ and production

Year	Barrows & gilts	Sows	Boars	Total	Dressed weight	Commercial production
		1,000 head			Pounds	Million pounds
1986						
I	19,272	920	187	20,379	175	3,570
II	19,224	896	196	20,316	176	3,568
III	17,365	999	210	18,573	174	3,237
IV	19,223	927	179	20,330	178	3,623
Year	75,084	3,742	772	79,598	176	13,998
1987						
I	19,008	762	170	19,940	178	3,540
II	17,877	846	188	18,911	176	3,327
III	18,201	1,009	186	19,396	174	3,384
IV	21,776	888	170	22,834	178	4,061
Year	76,862	3,505	714	81,081	177	14,312
1988						
I	20,293	854	192	21,339	177	3,787
II	19,727	941	200	20,868	179	3,726

1/ Classes estimated.

Table 26--Farrow-to-finish hog production costs and returns, 1,600 head annual sales
North Central Region 1/

Item	1987		1988						
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.
Dollars per cwt									
Cash receipts: 2/									
Market hogs (94.25 lb)	38.76	39.41	42.37	44.24	40.49	40.13	44.43	45.94	43.26
Cull sows (5.75 lb)	1.94	1.69	1.90	2.02	1.95	1.99	2.10	1.90	1.78
Total	40.70	41.10	44.27	46.26	42.44	42.12	46.53	47.84	45.04
Cash expenses:									
Feed--									
Corn (345.6 lb)	9.47	8.76	9.60	9.82	9.91	10.38	10.37	10.41	10.60
Soybean meal (70.6 lb)	7.32	7.32	7.32	7.39	7.39	7.39	8.43	8.43	8.43
Mixing concentrates (14.3 lb)	2.84	2.84	2.84	2.82	2.82	2.82	2.85	2.85	2.85
Total feed	19.63	18.92	19.76	20.03	20.12	20.59	21.65	21.69	21.88
Other:									
Veterinary and medicine 3/	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Fuel, lube, and electricity	1.48	1.48	1.48	1.50	1.50	1.50	1.50	1.50	1.50
Machinery and building repairs	2.42	2.42	2.42	2.42	2.42	2.45	2.45	2.45	2.45
Hired labor 4/	1.27	1.27	1.27	1.27	1.27	1.38	1.38	1.38	1.38
Miscellaneous	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61
Total variable expenses	26.14	25.43	26.27	26.56	26.65	27.26	28.32	28.36	28.55
General farm overhead	1.41	1.42	1.53	1.61	1.47	1.62	1.63	1.63	1.63
Taxes and insurance	0.63	0.63	0.63	0.63	0.63	0.63	0.71	0.71	0.71
Interest	3.43	3.46	3.73	3.89	3.57	3.93	3.97	3.97	3.97
Total fixed expenses	5.47	5.51	5.89	6.13	5.67	6.18	6.31	6.31	6.31
Total cash expenses 5/	31.61	30.94	32.16	32.69	32.32	33.44	34.63	34.67	34.86
Receipts less cash expenses	9.09	10.16	12.11	13.57	10.12	13.21	12.02	11.98	11.79
Capital replacement	5.77	5.77	5.78	5.84	5.84	5.84	5.91	5.91	5.91
Receipts less cash expenses and replacement	3.32	4.39	6.33	7.73	4.28	7.37	6.11	6.07	5.88

1/ The feed rations and expense items do not necessarily coincide with the experience of individual hog operations and are an average of a group of operators. For individual use, adjust expenses and prices for management, production levels and locality of operation. 2/ Based on 94.25 lb of barrows and gilts liveweight and 5.75 lb of sows per cwt sold. 3/ Includes costs for feed medication, that is usually included as part of the feed cost. 4/ Based on .204 hours per cwt of liveweight hog marketed. 5/ Do not include a charge for family or operator labor (.732 hours) or a charge for land and fixed assets.

Table 27--Corn Belt hog feeding: Selected costs at current rates 1/

Purchased during: Marketed during:	Sept. 87 Jan. 88	Oct. Feb.	Nov. Mar.	Dec. Apr.	Jan. May	Feb. June	Mar. July	Apr. Aug.	May Sept	June Oct.	July Nov.
Expenses: (\$/head)											
40-50 lb feeder pig	47.28	41.53	36.56	31.74	37.47	44.80	48.65	52.16	46.85	31.40	27.57
Corn (11 bu)	15.95	16.83	17.71	18.76	19.08	20.02	20.13	20.52	21.34	26.46	37.51
Protein supplement (130 lb)	18.72	18.79	18.79	18.79	20.28	20.28	20.30	20.02	20.02	20.02	25.29
Total feed	34.67	35.62	36.50	37.55	39.36	40.30	40.43	40.54	41.36	46.48	62.80
Labor & management (1.3 hr)	12.19	10.61	10.61	10.61	10.86	10.86	10.86	12.27	12.27	12.27	12.27
Vet medicine 2/	2.67	2.68	2.68	2.68	2.70	2.70	2.70	2.73	2.73	2.74	2.80
Interest on purchase (4 mo)	1.73	1.55	1.37	1.19	1.40	1.68	1.82	1.92	1.72	1.15	1.03
Power, equip, fuel, shelter depreciation 2/	6.50	6.52	6.52	6.52	6.55	6.55	6.55	6.65	6.65	6.67	6.81
Death loss (4% of purchase)	1.89	1.66	1.46	1.27	1.50	1.79	1.95	2.09	1.87	1.26	1.10
Transportation (100 miles)	.48	.48	.48	.48	.48	.48	.48	.48	.48	.48	.48
Marketing expenses	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Miscel. & indirect costs 2/	.67	.67	.67	.67	.67	.67	.67	.68	.68	.68	.70
Total	109.22	102.46	97.99	93.85	102.13	110.97	115.25	120.66	115.75	104.27	116.70
Selling Price Required To Cover: (\$/cwt)											
Feed and feeder costs (220 lb)	37.25	35.07	33.21	31.50	34.92	38.68	40.49	42.14	40.10	35.40	41.08
All costs (220 lb)	49.65	46.57	44.54	42.66	46.42	50.44	52.39	54.85	52.61	47.40	53.05
Feed cost per 100-lb gain (180 lb)	19.26	19.79	20.28	20.86	21.87	22.39	22.46	22.52	22.98	25.82	34.89
Barrows and gilts, 7 mths	44.43	47.01	42.79	42.10	47.55	48.06	45.57				
Net margin	-5.22	.44	-1.75	-.56	1.13	-2.38	-6.82				
Prices:											
40-lb feeder pig (So. Missouri) \$/head	47.28	41.53	36.56	31.74	37.47	44.80	48.65	52.16	46.85	31.40	27.57
Corn \$/bu 3/	1.45	1.53	1.61	1.70	1.74	1.82	1.84	1.86	1.94	2.42	3.41
Protein supp. (38-42%) \$/cwt 4/	14.40	14.45	14.45	14.45	15.60	15.60	15.60	15.40	15.40	15.40	19.45
Labor & management \$/hr 5/	9.38	8.16	8.16	8.16	8.35	8.35	8.35	9.44	9.44	9.44	9.44
Interest rate (annual)	11.00	11.22	11.22	11.22	11.22	11.22	11.22	11.02	11.02	11.02	11.17
Transportation rate \$/cwt (100 miles) 6/	.22	.22	.22	.22	.22	.22	.22	.22	.22	.22	.22
Marketing expenses \$/cwt 7/	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Index of prices paid by farmers (1910-14=100)	1128	1132	1132	1132	1138	1138	1138	1158	1158	1158	1182

1/ Although a majority of hog feeding operations in the Corn Belt are from farrow-to-finish, relative fattening expenses will be similar. Costs represent only what expenses would be if all selected items were paid for during the period indicated. The feed rations and expense items do not necessarily coincide with the experience of individual feeders. For individual use, adjust expenses and prices for management, production level, and locality of operation. 2/ Adjusted monthly by the index of prices paid by farmers for commodities, services, interest, taxes, and wage rates. 3/ Average price received by farmers in Iowa and Illinois. 4/ Average prices paid by farmers in Iowa and Illinois. 5/ Assumes an owner-operator receiving twice the farm labor rate. 6/ Converted from cents/mile for a 44,000-pound haul. 7/ Yardage plus commission fees at a Midwest terminal market.

Table 28--U.S. Pork imports, carcass weight 1/

Country or area	Annual 1987	January-May		
		1987	1988	Percent change
	Million pounds			Percent
Imports				
Canada	545.6	227.6	242.1	+6.4
Denmark	345.3	137.5	130.7	-4.9
Poland	125.3	49.5	52.8	+6.8
Hungary	50.0	20.1	17.8	-11.4
Other	128.9	47.9	54.8	+14.5
Total	1,195.1	482.5	498.3	+3.3
Exports				
Japan	61.7	18.7	44.4	+137.4
Canada	9.4	3.5	3.4	-3.3
Mexico	7.1	.6	3.7	+503.8
Caribbean	12.3	4.7	3.3	-31.2
Other	18.8	10.2	8.1	-21.3
Total	109.3	37.7	62.7	+66.2

1/ Data may not add due to rounding. Percent change calculated from unrounded data.

reduced pork supplies could support the market in the first half. From the mid-\$40's per cwt in January-March, average prices at the 7 markets could rise to the high \$40's in the second quarter and to the low \$50's in the third quarter. A seasonal decline in the fall may only bring prices back to the high to mid-\$40's at the end of the year.

U.S. Pork Trade

U.S. Pork Imports

U.S. pork imports are forecast to increase to 1,275 million pounds, carcass weight, in 1988 but decline to 1,200 million pounds in 1989. Pork imports come mainly from Canada and Denmark. In Canada, hog marketings are expected to increase 8 percent during 1988. However, because of the drought in Canada, feed prices are expected to increase and hog marketings are forecast to be up only 2 percent in 1989. Also, because of the proposed reduction in the countervailing duty deposit rate on live hogs imported from Canada, more Canadian hogs are expected to be imported into the United States during the last half of 1988 and in 1989. There could be some shift away from Canadian pork exports to more live hogs.

Imports of pork from Denmark have been down and are not expected to show much strength this year. Pork output and hog

Table 29--U.S. live hogs trade 1/

Country or area	Annual 1987	January-May		
		1987	1988	Percent Change
		1,000 head		Percent
Imports				
Mexico	445.9	180.5	263.1	+45.8
Canada	.2	.2	.6	+199.5
Total	446.1	180.7	263.7	+45.9
Exports				
Venezuela	.5	.1	1.4	+1,291.0
Mexico	1.2	.4	.5	+41.4
Other	5.6	1.9	1.3	-29.5
Total	7.4	2.4	3.3	+37.1

1/ May not add due to rounding. Percent change calculated from unrounded data.

inventories in Denmark are forecast to be lower in 1988 as lower prices and increased costs squeeze returns to producers. Some operations are stopping production rather than incur the cost of manure tanks, an environmental protection measure the Danish Parliament is now requiring for livestock producers. While the number of small operations is declining, some large hog operations are increasing output to take advantage of economies of size. For 1989, a small increase in output is expected as prices are likely to be up. Increased demand from other European countries is forecast to absorb the increase in Danish pork exports.

U.S. Pork Exports To Decline in 1989

U.S. pork exports are forecast to reach 145 million pounds during 1988 and 130 million pounds in 1989. Exports during the second quarter of 1988 were unusually heavy because of additional sales to Japan. During this period, the Japanese increased imports from Denmark, Canada, as well as the United States to cover the temporary disruption in trade with Taiwan when sulfamethazine residues were found in Taiwanese pork. This event is not expected to occur again in 1989. While U.S. pork exports are expected to remain strong in 1989, they may not surpass 1988's level.

Table 30--Red meat supply and utilization, carcass and retail weight 1/

Year	Production		Begin- ning stocks	Im- ports	Total supply	Ex- ports	Ship- ments	Ending stocks	Total disap- pearance	Per capita	
	Commer- cial	Farm								Carcass weight	Retail weight
Million pounds											
Pounds											
Beef:											
1987											
I	5,754	56	412	543	6,764	127	14	411	6,213	25.6	18.2
II	5,737	25	411	627	6,800	136	13	337	6,315	25.9	18.4
III	6,064	24	337	681	7,106	159	14	381	6,552	26.9	19.1
IV	5,850	56	381	418	6,705	183	12	386	6,125	25.0	17.8
Year	23,405	161	412	2,269	26,247	604	52	386	25,205	103.4	73.4
1988 2/											
I	5,696	56	386	703	6,841	134	15	419	6,272	25.6	18.1
II	5,784	25	419					330			
Year	23,082	161	386	2,350	25,977	620	61	400	24,896	101.2	71.8
1989 2/											
Year	21,625	161	400	2,200	24,386	670	60	325	23,331	94.0	66.7
Pork:											
1987											
I	3,540	22	248	290	4,100	19	31	289	3,762	15.5	14.6
II	3,327	9	289	296	3,921	27	28	245	3,620	14.9	14.1
III	3,384	9	245	299	3,938	21	33	244	3,639	14.9	14.1
IV	4,061	22	244	310	4,637	42	32	347	4,216	17.2	16.4
Year	14,312	62	248	1,195	15,817	109	124	347	15,237	62.5	59.2
1988 2/											
I	3,787	22	347	310	4,466	25	30	419	3,992	16.3	15.3
II	3,726	9	419					440			
Year	15,663	62	347	1,275	17,347	145	135	375	16,692	67.8	63.7
1989 2/											
Year	15,525	62	375	1,200	17,162	130	140	300	16,592	66.8	62.8
Veal:											
1987											
I	112	5	7	6	130	2	0	6	122	0.5	0.4
II	101	1	6	4	112	2	0	4	106	0.4	0.4
III	99	2	4	6	111	1	0	4	107	0.4	0.4
IV	104	5	4	8	121	2	0	4	115	0.5	0.4
Year	416	13	7	24	460	7	1	4	449	1.8	1.5
1988 2/											
I	97	5	4	9	115	2	0	5	108	0.4	0.4
II	92	1	5					5			
Year	399	13	4	28	444	5	1	7	431	1.8	1.5
1989 2/											
Year	400	13	7	25	445	5	1	7	432	1.7	1.4
Lamb and Mutton:											
1987											
I	76	2	13	13	104	0	1	14	89	0.4	0.3
II	75	1	14	12	101	0	1	12	88	0.4	0.3
III	77	1	12	9	99	0	1	7	91	0.4	0.3
IV	81	2	7	11	101	1	0	8	92	0.4	0.3
Year	309	6	13	44	372	1	2	8	360	1.5	1.3
1988 2/											
I	85	2	8	19	114	0	0	7	107	0.4	0.4
II	80	1	7					9			
Year	328	6	8	58	400	1	1	9	389	1.6	1.4
1989 2/											
Year	335	6	9	60	410	1	0	9	400	1.6	1.4
Total red meat:											
1987											
I	9,482	85	680	851	11,098	148	45	719	10,186	41.9	33.6
II	9,240	36	719	939	10,934	165	42	599	10,128	41.6	33.2
III	9,624	36	599	995	11,254	182	48	635	10,389	42.6	33.9
IV	10,096	85	635	748	11,564	227	45	744	10,548	43.1	34.9
Year	38,442	242	680	3,533	42,897	722	179	744	41,251	169.2	135.4
1988 2/											
I	9,665	85	745	1,041	11,536	161	46	850	10,479	42.7	34.2
II	9,682	36	850					784			
Year	39,470	242	745	3,711	44,168	771	198	791	42,408	172.2	138.4
1989 2/											
Year	37,885	242	791	3,485	42,403	806	201	641	40,755	164.1	132.4

1/ May not add due to rounding. 2/ Forecast.

Table 31--Poultry supply and utilization

Year	Slaughter			Begin- ning stocks	Total supply	Ex- ports	Ship- ments	Ending stocks	Total disap- pearance	Per capita Retail weight
	Feder- ally Inspected	Other	Total							
Million pounds										
Pounds										
Young chicken:										
1987										
I	3,735	27	3,762	24	3,786	142	39	25	3,579	14.7
II	3,907	26	3,933	25	3,958	198	32	24	3,704	15.2
III	3,966	17	3,984	24	4,008	223	40	28	3,717	15.2
IV	3,895	21	3,916	28	3,944	188	40	25	3,691	15.1
Year	15,502	92	15,594	24	15,618	752	151	25	14,691	60.2
1988 2/										
I	3,996	25	4,021	25	4,046	163	37	36	3,810	15.5
II	4,075	27	4,099	36	4,135			40		
Year	16,086	97	16,183	25	16,208	673	142	30	15,362	62.4
1989 2/										
Year	16,775	99	16,874	30	16,904	665	140	25	16,074	64.7
Other chicken:										
1987										
I	133	24	157	163	320	5	1	172	143	0.6
II	155	28	183	172	355	6	1	182	167	0.7
III	129	23	152	182	333	3	0	166	165	0.7
IV	135	24	158	166	324	2	1	188	133	0.5
Year	552	98	650	163	814	15	2	188	608	2.5
1988 2/										
I	153	27	181	188	369	6	0	197	166	.7
II	150	25	177	197	373			155		
Year	558	99	658	188	846	18	3	150	674	2.7
1989 2/										
Year	550	98	648	150	798	18	4	110	666	2.7
Total chicken:										
1987										
I	3,868	51	3,919	187	4,106	147	40	197	3,722	15.3
II	4,062	54	4,116	197	4,313	204	32	206	3,871	15.9
III	4,095	41	4,135	206	4,341	226	40	194	3,881	15.9
IV	4,030	44	4,074	194	4,268	191	41	213	3,824	15.6
Year	16,054	190	16,245	187	16,432	767	153	213	15,298	62.8
1988 2/										
I	4,149	52	4,201	213	4,415	169	37	202	3,976	16.2
II	4,225	52	4,276	233	4,508			195		
Year	16,644	196	16,841	213	17,054	691	145	180	16,036	65.1
1989 2/										
Year	17,325	187	17,522	180	17,702	683	144	135	17,370	67.4
Turkey:										
1987										
I	670	19	689	178	867	6	0	226	635	2.6
II	865	26	891	226	1,117	7	0	382	728	3.0
III	1,100	32	1,132	382	1,514	7	0	641	866	3.5
IV	1,082	34	1,116	641	1,756	13	3	282	1,458	6.0
Year	3,717	111	3,828	178	4,006	33	4	282	3,686	15.1
1988 2/										
I	837	24	860	282	1,143	13	1	353	776	3.2
II	980	21	1,009	353	1,362			467		
Year	3,892	114	4,066	282	4,288	38	4	175	4,072	16.5
1989 2/										
Year	3,940	116	4,056	175	4,231	36	4	175	4,016	16.2
Total Poultry:										
1987										
I	4,538	70	4,608	365	4,973	153	40	423	4,357	17.9
II	4,927	80	5,007	423	5,430	211	32	588	4,599	18.9
III	5,195	73	5,268	588	5,855	232	41	835	4,747	19.5
IV	5,112	78	5,190	835	6,025	204	44	495	5,282	21.6
Year	19,772	301	20,072	365	20,437	800	157	495	18,985	77.8
1988 2/										
I	4,986	76	5,062	495	5,557	182	38	585	4,751	19.4
II	5,205	73	5,285	585	5,870			662		
Year	20,536	311	20,847	495	21,342	729	149	355	20,108	81.7
1989 2/										
Year	21,265	313	21,578	355	21,933	719	148	310	20,756	83.6

1/ May not add due to rounding. 2/ Forecast.

Table 32--Total red meat and poultry supply and utilization, carcass and retail weight 1/

Year	Total produc- tion	Begin- ning stocks	Im- ports	Total supply	Ex- ports	Ship- ments	Ending stocks	Total disap- pearance	Per capita	
									Carcass weight	Retail weight
				Million pounds			Pounds			
Total red meat and poultry:										
1987										
I	14,175	1,045	852	16,072	301	86	1,142	14,542	59.9	52.0
II	14,283	1,142	940	16,364	376	74	1,187	14,728	60.5	52.6
III	14,928	1,187	995	17,109	414	88	1,470	15,136	62.0	53.9
IV	15,371	1,470	749	17,589	431	88	1,240	15,830	64.7	57.0
Year	58,756	1,045	3,533	63,334	1,522	336	1,240	60,236	247.1	215.3
1988 2/										
I	14,812	1,240	1,041	17,093	343	84	1,435	15,222	62.0	53.5
II	15,003	1,435								
Year	60,559	1,240	3,711	65,110	1,500	347	1,146	62,508	253.8	220.1
1989 2/										
Year	59,705	1,146	3,485	64,336	1,525	349	951	61,511	247.7	215.9

1/ May not add due to rounding. 2/ Forecast.

Table 33--Average retail price per pound of specified meat cuts

Year and item	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Dollars												
Choice Beef:												
Ground chuck												
1987	1.69	1.65	1.68	1.70	1.70	1.71	1.71	1.72	1.72	1.71	1.74	1.75
1988	1.74	1.74	1.75	1.74	1.74	1.77						
Ground beef												
1987	1.30	1.27	1.28	1.29	1.32	1.30	1.31	1.32	1.32	1.33	1.35	1.32
1988	1.31	1.32	1.34	1.34	1.36	1.39						
Chuck roast, bone in												
1987	1.68	1.64	1.63	1.70	1.65	1.71	1.70	1.66	1.67	1.72	1.71	1.66
1988	1.64	1.74	1.69	1.72	1.80	1.78						
Round roast, boneless												
1987	2.54	2.47	2.49	2.45	2.59	2.56	2.50	2.51	2.57	2.58	2.58	2.56
1988	2.56	2.61	2.67	2.60	2.61	2.66						
Rib roast, bone in												
1987	3.44	3.44	3.37	3.29	3.48	3.64	3.69	3.67	3.60	3.63	3.64	3.57
1988	3.57	3.59	3.66	3.75	3.72	3.93						
Round steak, boneless												
1987	2.80	2.80	2.76	2.81	2.94	2.96	2.91	2.93	2.92	2.96	2.92	2.93
1988	2.88	2.94	2.94	3.01	3.00	3.05						
Sirloin steak, bone in												
1987	2.81	2.96	2.87	3.02	3.22	3.44	3.36	3.23	3.26	3.12	3.15	3.16
1988	2.99	3.04	3.12	3.18	3.35	3.49						
Chuck steak, bone in												
1987	1.71	1.65	1.64	1.69	1.59	1.62	1.62	1.61	1.61	1.61	1.62	1.62
1988	1.61	1.62	1.64	1.65	1.67	1.71						
T-Bone steak, bone in												
1987	3.86	3.79	3.83	4.01	4.33	4.64	4.77	4.45	4.37	4.31	4.29	4.27
1988	4.31	4.27	4.33	4.43	4.54	4.90						
Porterhouse steak, bone in												
1987	4.22	4.19	4.22	4.26	4.36	4.44	4.44	4.42	4.39	4.40	4.44	4.43
1988	4.40	4.43	4.48	4.51	4.56	4.66						
Pork:												
Bacon, sliced												
1987	2.12	2.09	2.10	2.08	2.11	2.13	2.23	2.28	2.28	2.19	2.07	2.02
1988	1.95	1.94	1.92	1.91	1.90	1.90						
Chops, center cut												
1987	2.72	2.70	2.64	2.74	2.78	2.97	3.01	3.00	2.98	2.92	2.74	2.67
1988	2.66	2.72	2.68	2.71	2.78	2.93						
Ham, rump or shank half												
1987	1.60	1.59	1.50	1.36	1.44	1.50	1.52	1.56	1.58	1.62	1.65	1.60
1988	1.63	1.57	1.60	1.58	1.58	1.65						
Sirloin roast, bone in												
1987	1.90	1.82	1.81	1.89	1.92	1.95	2.02	2.04	2.05	2.01	1.95	1.91
1988	1.92	1.90	1.90	1.88	1.89	1.94						
Shoulder picnic, bone in												
1987	1.15	1.10	1.06	1.03	1.08	1.03	1.11	1.14	1.16	1.19	1.16	1.16
1988	1.14	1.13	1.14	1.12	1.09	1.15						
Sausage, fresh, pork, loose												
1987	2.01	2.02	1.99	1.97	1.98	1.94	2.00	2.02	2.01	1.92	1.97	1.99
1988	2.05	1.97	1.99	2.02	2.02	1.95						
Miscellaneous cuts:												
Ham, canned, 3 or 5 lb												
1987	2.84	2.85	2.83	2.77	2.74	2.76	2.83	2.84	2.83	2.85	2.78	2.72
1988	2.77	2.75	2.71	2.73	2.74	2.73						
Frankfurters, all meat												
1987	1.98	1.99	1.96	1.98	1.96	2.00	1.91	2.01	1.98	2.04	2.04	2.02
1988	2.02	2.04	2.05	2.01	2.02	2.02						
Bologna												
1987	2.22	2.17	2.19	2.15	2.14	2.15	2.21	2.21	2.21	2.20	2.21	2.24
1988	2.24	2.23	2.23	2.20	2.18	2.24						
Beef liver												
1987	1.02	1.00	1.03	1.02	1.04	1.03	1.03	1.03	1.03	1.05	1.02	1.03
1988	1.01	1.01	1.02	1.04	1.04	1.06						

Table 34--Selected price statistics for meat animals and meat, 1987-88

Item	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
Dollars per cwt											
Slaughter Steers:											
Omaha											
Choice, 1000-1100 lb	64.81	64.81	64.20	63.93	65.00	68.31	71.53	72.71	75.15	70.58	65.96
Select, 1000-1100 lb	59.38	59.90	59.50	59.25	63.14	65.84	69.12	71.14	72.86	67.57	63.58
California											
Choice, 1000-1100 lb	66.90	65.94	65.88	65.15	65.58	69.00	71.05	72.38	74.00	69.73	67.38
Colorado											
Choice, 1000-1100 lb	66.41	66.94	66.87	65.48	66.48	70.08	71.52	nq	na	nq	nq
Texas											
Choice, 1000-1100 lb	66.46	67.00	67.09	66.12	67.30	70.53	72.29	73.96	76.06	71.31	66.88
Slaughter heifers:											
Omaha											
Choice, 1000-1200 lb	64.31	64.43	63.79	63.63	65.07	68.05	71.19	72.79	74.88	69.90	65.16
Select, 900-1000 lb	61.08	61.13	60.63	60.22	62.13	64.71	67.48	68.84	70.71	65.65	61.54
Cows:											
Omaha											
Commercial	47.83	46.25	44.56	46.20	45.09	46.16	47.30	49.35	49.33	42.70	44.69
Breaking Utility	47.62	46.41	44.83	46.69	45.90	47.32	48.43	49.41	48.79	42.68	45.39
Boning Utility	41.79	40.25	38.97	41.30	47.83	49.55	49.83	49.50	49.16	43.68	46.60
Canner	41.79	40.25	38.97	41.30	42.28	44.10	43.28	43.97	42.31	38.16	
Cutter	45.42	44.52	42.93	45.31	46.52	48.91	48.50	48.60	47.69	42.49	43.95
Vealers:											
Choice, So. St. Paul	80.25	82.50	82.50	83.00	86.88	87.50	87.50	96.41	97.66	100.88	77.50
Feeder steers: 1/											
Kansas City											
Medium No. 1,											
400-500 lb	92.40	87.75	89.33	87.30	94.25	97.83	99.20	101.63	94.50	90.50	85.75
600-700 lb	81.50	77.00	79.50	78.90	85.00	83.53	85.20	86.50	82.88	77.38	79.08
All weights and grades	77.10	73.21	74.92	73.69	80.26	81.64	83.12	82.61	78.99	70.77	74.14
Okla. City											
Medium No. 1											
400-500 lb	98.63	93.38	95.05	95.69	96.96	104.42	101.70	105.03	102.33	93.98	95.89
600-700	83.45	79.68	79.99	80.97	83.73	85.99	85.63	86.50	82.88	77.38	79.08
700-800	80.75	75.84	77.10	78.06	81.29	82.25	81.47	79.87	79.90	74.83	77.77
Amarillo											
Medium No. 1,											
600-700 lb	80.90	75.63	73.84	74.75	80.22	83.92	82.61	81.31	81.25	75.95	77.67
Georgia Auctions											
Medium No. 1,											
600-700 lb	75.60	70.63	72.13	71.67	77.75	81.75	82.60	80.13	79.88	72.60	75.67
Medium No. 2,											
400-500 lb	80.40	74.00	78.50	77.33	82.88	88.50	89.30	88.38	85.25	76.40	81.67
Feeder heifers:											
Medium No. 1,											
Kansas City											
400-500 lb	82.40	77.06	78.67	80.20	86.50	86.38	88.60	89.56	87.63	nq	77.75
600-700 lb	74.00	72.81	74.83	74.20	76.00	77.35	78.10	76.88	77.25	72.75	72.63
Okla. City											
400-500 lb.	83.80	83.49	83.56	81.53	83.08	88.39	89.05	90.72	91.44	79.86	81.77
600-700 lb.	76.26	73.99	72.32	73.37	76.75	78.49	77.91	76.15	76.71	71.75	74.68
Slaughter hogs:											
Barrows and gilts											
Omaha No. 1 & 2,											
230-240 lb	55.29	49.20	42.07	42.71	46.41	48.55	43.93	42.59	48.93	49.50	46.92
All weights	54.63	48.97	40.57	41.35	44.61	46.78	42.62	41.95	47.51	47.80	45.31
Sioux City	55.19	49.28	40.74	41.56	44.59	48.50	43.19	42.28	47.75	48.26	45.60
7 markets 2/	54.72	48.75	40.65	41.14	44.43	47.01	42.79	42.10	47.55	48.06	45.57
Sows:											
7 markets 2/	49.72	44.87	35.12	32.96	34.18	36.98	35.03	35.51	37.68	33.91	31.79
Feeder pigs:											
No. 1 & 2, So. Mo.,											
40-50 lb (per hd.)	47.28	41.53	36.56	31.74	37.47	44.80	48.65	52.16	46.85	31.40	25.57

Continued--

Table 34--Selected price statistics for meat animals and meat, 1987-88--Continued

Item	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
Dollars per cwt											
Slaughter lambs:											
Choice, San Angelo	70.05	66.25	65.00	73.83	83.53	77.25	83.75	76.50	72.67	59.38	59.67
Choice, So. St. Paul	66.86	65.23	66.30	74.49	83.88	80.18	76.40	69.85	71.73	56.90	58.50
Ewes, Good,											
San Angelo	39.81	37.12	37.83	39.88	43.19	38.25	41.17	40.17	36.38	36.30	37.83
So. St. Paul	21.10	22.00	22.00	22.00	25.00	22.25	18.98	17.33	11.45	11.08	12.94
Feeder lambs:											
Choice, San Angelo	102.55	102.00	99.50	105.83	113.63	112.63	111.30	100.25	90.63	77.80	79.67
Choice, So. St. Paul	88.00	93.00	95.63	102.08	111.00	108.63	102.50	88.25	83.50	71.10	61.89
Farm prices:											
Beef cattle	63.70	62.90	62.00	62.20	65.40	67.40	68.30	69.00	69.30	65.00	63.60
Calves	85.90	81.40	82.90	83.00	88.20	92.60	93.50	93.20	93.40	84.90	85.00
Hogs	54.30	48.90	40.60	40.30	43.00	45.80	42.20	41.90	46.30	47.10	44.10
Sheep	32.50	31.50	30.90	32.30	34.70	30.10	29.70	26.00	26.10	23.20	22.10
Lambs	76.80	71.90	65.70	72.80	80.70	80.40	80.20	74.80	72.60	60.20	60.20
Meat prices:											
Wholesale											
Central U.S. markets											
Steer beef, Choice,											
600-700 lb	96.87	96.77	95.34	94.50	97.15	99.50	103.47	105.25	111.70	106.38	97.09
Heifer beef, Choice											
550-700 lb	96.15	96.03	94.16	93.73	96.60	98.98	103.19	104.97	111.20	104.92	96.28
Cow beef, Canner											
and Cutter	86.82	83.80	83.41	88.45	88.98	92.18	90.33	89.69	89.88	81.28	85.74
Boxed beef											
cut-out value	104.33	103.97	102.62	101.82	102.55	105.94	108.50	110.79	116.73	111.97	107.09
Pork loins,											
14-18 lb 4/	122.66	103.49	80.35	84.70	102.43	94.93	87.82	94.03	112.75	111.31	104.96
Pork bellies,											
12-14 lb	59.74	49.39	45.86	42.60	51.82	48.40	45.32	43.13	46.09	45.51	40.84
Hams, skinned,											
14-17 lb	93.58	97.81	96.36	91.98	66.70	76.67	78.35	68.27	67.70	66.51	65.90
Pork cut-out value	75.40	68.28	60.70	60.45	61.65	62.01	58.36	57.86	63.76	64.69	60.59
East Coast:											
Lamb, Choice and											
Prime, 35-45 lb	144.50	145.69	145.38	153.30	161.88	165.00	167.03	156.25	153.75	128.50	128.75
55-65 lb	137.60	134.56	129.56	144.90	156.88	151.25	153.37	141.25	141.38	125.00	128.75
West Coast:											
Steer beef, Choice,											
600-700 lb	103.00	101.33	nq	nq	nq	nq	nq	nq	nq	nq	nq
Cents per lb.											
Retail Prices:											
Beef											
Choice	245.5	245.7	246.6	245.3	242.9	246.3	248.5	250.2	253.2	259.9	
All Fresh	213.1	214.5	217.7	218.6	213.9	217.6	220.0	219.7	221.5	227.2	
Pork	196.9	194.4	189.2	185.6	185.3	183.1	183.3	182.9	183.6	187.9	
1982-84=100											
Price indexes: (BLS)											
Retail meats	112.0	111.8	111.1	110.4	110.1	110.2	109.8	110.8	111.7	113.8	
Beef and veal	107.4	107.8	108.6	108.5	107.7	108.5	109.8	110.5	111.7	114.1	
Pork	121.1	119.0	115.5	113.1	113.4	112.3	112.6	111.4	111.7	114.6	
Other meats	112.3	112.2	112.2	112.1	112.1	112.3	112.0	111.5	112.3	113.0	
Poultry	112.5	111.8	107.9	107.8	108.9	108.4	109.1	110.2	114.0	120.1	
Livestock-feed ratios,											
Omaha: 3/											
Steer-corn	42.8	41.2	38.4	36.7	36.4	37.4	38.4	39.3	38.6	27.9	24.5
Hog-corn	36.3	31.0	24.3	23.8	25.0	25.7	23.0	22.5	24.3	18.9	16.8

1/ Reflects new feeder cattle grades. 2/ St. Louis N.S.Y., Kansas City, Omaha, Sioux City, So. St. Joseph, So. St. Paul, and Indianapolis. 3/ Beef, Choice 2-3 550-700 lb. 4/ Prior to 1984, 8-14 lb; 1984 and 1985, 14-17 lb; 1986, 14-18 lb. 5/ U.S. #2, 175 lb carcass. 6/ Bushels of No. 2 yellow corn equivalent in value to 100 pounds live weight.

Table 35--Selected marketings, slaughter, stocks, and trade for meat animals and meat

Item	1987						1988					
	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
1,000 head												
Federally inspected:												
Slaughter												
Cattle	3,009	2,972	2,977	3,024	2,640	2,793	2,832	2,679	2,813	2,707	2,803	2,983
Steers	1,517	1,451	1,381	1,460	1,260	1,373	1,419	1,360	1,394	1,408	1,469	1,506
Heifers	889	932	1,023	929	784	836	864	792	868	800	827	888
Cows	545	533	511	573	547	535	503	480	498	449	481	533
Bulls and stags	58	56	62	62	49	49	46	47	53	50	54	56
Calves	220	202	229	233	211	242	205	203	216	169	171	204
Sheep and lambs	411	400	459	446	399	439	380	408	535	388	414	413
Hogs	6,019	6,019	6,855	7,519	7,121	7,583	6,803	6,518	7,505	6,929	6,713	6,715
Percentage sows	5.6	5.4	4.7	4.0	3.9	3.8	4.2	4.4	4.0	3.8	4.3	5.5
Pounds												
Average live wt per head												
Cattle	1,096	1,103	1,118	1,123	1,126	1,128	1,123	1,122	1,120	1,109	1,105	1,108
Calves	238	227	237	241	233	231	239	250	242	258	272	258
Sheep and lambs	118	118	120	123	122	124	123	125	129	128	127	125
Hogs	246	244	246	249	252	250	248	247	247	249	250	250
Average dressed wt												
Beef	656	662	670	677	671	670	671	669	670	667	665	665
Veal	146	137	143	146	142	142	145	153	147	157	165	158
Lamb and mutton	59	59	61	62	62	62	62	63	66	65	64	63
Pork	176	175	175	177	180	179	179	178	178	179	180	180
Million pounds												
Production												
Beef	1,966	1,959	1,988	2,038	1,766	1,865	1,893	1,784	1,878	1,798	1,874	1,976
Veal	31	27	32	33	29	34	29	30	31	26	28	32
Lamb and mutton	24	23	28	27	25	27	23	26	35	25	26	26
Pork	1,055	1,048	1,199	1,329	1,278	1,352	1,214	1,156	1,331	1,236	1,203	1,203
1,000 head												
Commercial: 1/												
Slaughter												
Cattle	3,099	3,056	3,068	3,131	2,751	2,899	2,921	2,758	2,896	2,784	2,908	3,067
Calves	231	212	240	246	222	252	214	210	223	176	179	212
Sheep and Lambs	426	416	474	460	412	451	390	416	548	404	427	428
Hogs	6,188	6,180	7,027	7,700	7,321	7,813	6,977	6,682	7,680	7,090	6,881	6,898
Million pounds												
Production												
Beef	1,851	1,958	2,017	2,007	2,040	2,098	1,828	1,924	1,943	1,842	1,918	2,024
Veal	34	30	35	36	32	36	32	32	33	28	30	34
Lamb and mutton	25	24	28	28	25	28	24	26	35	26	27	27
Pork	1,082	1,075	1,227	1,359	1,312	1,390	1,244	1,183	1,360	1,263	1,231	1,232
Cold storage stocks: 2/												
Beef	279	269	287	308	304	289	312	328	312	304	273	247
Veal	4	4	4	4	5	4	5	5	5	5	5	5
Lamb and mutton	9	8	7	7	9	8	8	8	7	8	8	9
Pork	181	175	186	212	252	285	287	308	346	396	389	364
Total meat	516	496	523	576	614	623	656	693	716	758	720	670
Trade:												
Imports (carcass wt)												
Beef	252.5	215.1	213.3	188.5	133.9	96.0	275.4	190.9	236.5	218.5	193.8	
Veal	1.4	1.2	3.5	5.5	1.9	1.1	4.1	2.5	2.9	1.7	1.1	
Lamb and mutton	2.9	2.3	3.6	2.6	2.4	2.4	7.1	5.9	6.2	6.0	4.9	
Pork	101.7	97.1	100.6	111.3	102.5	96.0	89.7	104.9	115.5	92.9	95.2	
Exports (carcass wt)												
Beef	52.7	50.9	55.7	63.7	67.1	51.9	43.4	40.3	50.0	52.3	51.1	
Veal	.5	.5	.4	.3	.4	.2	.6	.8	.7	.4	.9	
Lamb and mutton	.1	.2	.1	.2	.1	.1	.1	.1	.1	.1	.1	
Pork	6.8	5.7	8.6	12.2	16.5	13.5	8.1	7.8	9.4	16.0	21.5	

1/ Federally inspected and other commercial. 2/ End of month. Beginning January 1977, excludes beef and pork stocks in cooler.

POULTRY AND EGGS

Broilers

Broiler Prices Strong

The 12-city broiler price has ranged from the mid to upper 60 cents per pound during July and early August, up from 47 cents a year earlier. The increase was partly related to lower than expected chicken meat supplies during the same period. While the popular press has identified the drought as the cause for much of the higher chicken prices, chicken producers have not cut production in response to rising feed costs that quickly in the past. Furthermore, producers have been experiencing positive net returns even with higher feed costs. In reality, producers were moderating their output in response to negative returns experienced during the last half of 1987 and the first quarter of 1988. At the same time broiler supplies were being cut to below expected levels, demand factors were also affecting the market. Price specializing by the grocery trade and fast-food restaurants,

coupled with lower supplies of beef and higher beef retail prices, increased quantities demanded.

Net Returns Positive

With rising prices, net returns have risen also. The estimate of July net returns was 19.5 cents per pound. Net returns were higher only during 1986, when somewhat similar conditions affected the broiler market. Second-quarter net returns were 9.7 cents. Broiler producers' response to high net returns in 1986 was to produce 9 percent more meat in 1987. However in 1988, the drought has driven up feed prices much higher than during 1986, perhaps moderating producers' plans to expand production.

Broiler Production Continues To Increase

Broiler production during 1988 is forecast to increase 4 percent. Ready-to-cook production during first-half 1988, at 8.1 billion pounds, was 5 percent above a year earlier.

Table 36--Young chicken prices and price spreads, 1986-88

Item	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Cents per pound													
Farm price 1/													
1986	30.6	29.2	29.7	29.5	32.2	35.4	42.7	43.9	36.5	39.3	34.9	30.6	34.5
1987	31.1	30.1	29.1	29.6	30.0	27.6	28.1	31.6	28.5	25.2	26.4	24.6	28.5
1988	27.1	25.7	27.5	28.0	33.5	36.7	42.1						
Wholesale RTC													
12-city avg. 2/													
1986	51.7	49.0	50.3	50.0	54.6	58.3	69.1	69.7	61.0	61.6	57.5	50.0	56.9
1987	51.8	49.8	48.5	48.6	50.5	45.5	47.0	52.6	46.4	43.2	44.6	39.8	47.4
1988	43.9	44.9	48.4	48.7	56.3	61.1							
U.S. avg.													
retail price													
1986	76.6	77.1	76.7	75.2	76.9	79.5	88.9	95.8	91.0	90.0	87.8	86.5	83.5
1987	82.1	83.2	80.4	79.2	78.2	77.1	75.5	78.5	79.3	79.1	75.6	73.6	78.5
1988	74.0	74.5	75.3	76.0	79.6	86.8							
Price spreads													
Retail-to-cons.													
1986	19.5	21.8	21.0	19.2	16.3	15.5	16.4	20.0	21.6	20.5	22.6	30.0	20.4
1987	24.3	26.8	25.2	25.3	21.2	25.3	21.2	20.2	33.1	30.2	25.2	26.1	25.3
1988	24.1	24.4	18.8	22.1	23.6	25.8							
1982-84 = 100													
Retail pr. index													
Wh. chickens													
1986	105.0	105.6	106.0	103.9	106.1	109.8	121.9	132.3	125.5	124.9	123.0	121.0	115.4
1987	119.5	118.7	115.2	113.1	112.9	111.6	109.9	113.9	114.6	113.0	109.2	107.7	113.3
1988	107.9	109.5	110.3	111.6	117.4	125.9							

1/ Live weight. 2/ 12-city composite weighted average.

Table 37--Estimated costs and returns, 1987-88 1/

Year	Production costs		Wholesale		Net returns
	Feed	Total	Total costs 2/	Price 3/	
Market eggs (cts/doz)					
1987					
I	21.8	40.0	60.5	66.4	5.9
II	23.1	41.3	61.8	58.9	-2.9
III	23.9	42.1	62.6	64.1	1.5
IV	24.5	42.7	63.2	59.7	-3.5
Year 4/	23.3	41.5	62.0	62.3	0.2
1988					
I	26.1	44.3	64.8	57.1	-7.8
II 5/	27.1	45.3	65.8	54.6	-11.2
Broilers (cts/lb)					
1987					
I	12.7	20.7	42.0	50.0	8.0
II	12.8	20.8	42.1	48.1	6.0
III	14.3	22.3	44.1	48.8	4.7
IV	13.7	21.7	43.4	42.5	-0.8
Year 4/	13.4	21.4	42.9	47.4	4.4
1988					
I	15.4	23.4	45.6	45.5	-0.1
II 5/	15.3	23.3	45.5	55.3	9.8
Turkeys (cts/lb)					
1987					
I	18.4	32.1	56.5	57.0	0.5
II	18.2	31.9	56.1	58.7	2.6
III	20.4	34.1	58.9	55.0	-4.0
IV	19.8	33.5	58.2	57.6	-0.8
Year 4/	19.4	33.1	57.6	57.0	-0.7
1988					
I	21.9	35.6	60.8	48.1	-12.8
II 5/	22.0	35.7	60.9	50.8	-10.1

1/ Costs and prices are weighted by monthly production. 2/ Based on farm cost converted to wholesale market value. 3/ Wholesale prices used are the 12-metro area egg price, 12-city weighted average broiler price, and a weighted average of 8-16 lb. young hens and 14-22 lb. toms in Central, Western, and Eastern Regions. 4/ Weighted average. 5/ Preliminary.

Slaughter weights during the same period averaged only slightly higher, in contrast to the previous trend towards higher weights. Production increased 4 percent in the second quarter from a year earlier after increasing 7 percent in the first quarter.

Production Rate Slowing

The rate of increase in broiler production will probably fall during the third quarter from that of the first 6 months. May and June hatch and weekly chick placements in July have been running a little more than 2 percent above year-earlier levels. With slaughter weights increasing only fractionally, third-quarter production will probably increase about 3 percent.

Higher feed prices combined with uncertainty about the duration of higher than expected broiler prices, appear to be causing some vacillation in the industry's longer-term decisions. For example, firms have not been utilizing their hatching-egg flocks to capacity. The *July Eggs, Chickens, and Turkeys* report indicated the hatching-egg flock was 4 percent higher on July 1 than a year earlier, yet egg sets were only 0 to 1 percent above a year ago. The rate of lay for hatching-egg layers was down 1 percent from a year ago at the beginning of the month, but that still doesn't cover the discrepancy. The fact that the hatching-egg flock has risen to 4 percent above a year earlier, as opposed to 2 percent in June, might indicate that producers intend to increase production in the near future. As evidence of their tentativeness however, producers have increased heavy-type fowl slaughter during July, indicating a desire to lower rates of production. Producers appear to be taking a wait and see attitude towards broiler production until the full impact of the drought on the corn and soybean crops is known. Consequently, fourth-quarter production is projected to increase a little more than 1 percent.

Production Rate To Increase in 1989

Long-term indicators imply that the rate of increase could return towards the long-run trend of 4 percent a year during 1989. With potentially lower per capita supplies of red meat in every quarter of 1989, there may be stronger support for broiler prices. With

Table 38--Federally inspected young
chicken slaughter, 1987-88

Year	Number	Average weight	Live- weight	Certi- fied RTC
	Millions	Pounds	- Million Pounds -	
1987				
I	1,188	4.33	5,149	3,735
II	1,253	4.29	5,369	3,910
III	1,301	4.20	5,470	3,966
IV	1,229	4.35	5,349	3,891
Year	4,971	4.29	21,333	15,498
1988				
I	1,265	4.35	5,502	3,996
II	1,299	4.30	5,595	4,060
III				
IV				
Year				

Table 39--Broiler chicks hatched and pullet chicks placed
in hatchery supply flocks, 1986-88

Month	Broiler-type chicks			Pullet chicks placed in broiler hatchery supply flocks						
				Monthly placements			Cumulative placements 7-14 months earlier			
	1986	1987	1988	1986	1987	1988	1986	1987	1988	1989
	Thousands									
January	409,336	439,442	464,527	3,395	4,077	3,389	27,483	29,039	33,028	27,873
February	376,092	405,252	431,724	3,420	3,699	4,038	27,940	29,427	33,254	
March	432,871	456,081	482,769	3,675	4,111	4,123	27,374	29,523	32,805	
April	424,078	455,679	470,154	4,062	4,713	3,831	27,156	29,722	32,185	
May	438,623	473,827	485,489	3,938	4,055	4,197	27,321	30,148	32,612	
June	428,691	461,421	472,549	3,515	4,181	3,818	27,002	30,242	32,264	
July	429,883	463,321		3,672	3,995		26,868	30,603	31,668	
August	415,991	455,676		3,846	3,974		26,591	30,742	31,002	
September	401,676	433,769		3,594	3,457		26,849	30,926	30,859	
October	416,193	441,893		3,846	4,126		27,124	31,365	31,402	
November	402,582	423,147		3,769	3,763		28,021	32,232	31,259	
December	437,287	469,720		4,423	4,117		28,706	32,693	31,999	

Table 40--Broilers: Eggs set and chicks placed weekly in 12 commercial States, 1987-88 1/

Period 2/ Month and day 2/	Eggs set			Chicks placed		
	1987	1988	Percent of previous year	1987	1988	Percent of previous year
	-- - Thousands -- -		Percent	-- - Thousands -- -		Percent
January						
2	112,039	116,091	104	87,427	90,561	104
9	112,316	115,934	103	86,402	92,890	108
16	112,714	114,423	102	85,691	91,299	107
23	112,568	112,593	100	86,904	91,008	105
30	112,791	113,043	100	86,374	92,173	107
February						
6	111,614	116,587	104	86,509	90,937	105
13	111,696	117,406	105	87,285	88,801	102
20	114,761	118,448	103	87,483	87,987	101
27	116,326	119,719	103	87,031	91,987	106
March						
5	115,733	118,971	103	86,840	92,616	107
12	115,980	118,964	103	89,084	93,955	105
19	115,239	118,707	103	90,547	94,901	105
26	117,959	117,130	99	90,034	94,582	105
April						
2	118,697	119,319	101	90,643	94,251	104
9	119,414	118,044	99	89,105	95,041	107
16	118,184	119,121	101	91,486	92,668	101
23	117,771	118,105	100	93,251	94,647	101
30	117,283	117,225	100	93,049	94,575	102
May						
7	118,880	118,385	100	91,840	94,875	103
14	118,834	119,186	100	91,312	94,782	104
21	118,211	118,238	100	91,746	93,120	101
28	120,072	119,871	100	93,181	93,935	101
June						
4	119,205	119,185	100	92,478	94,721	102
11	119,610	120,385	101	91,724	94,448	103
18	119,741	119,443	100	93,083	95,536	103
25	116,507	118,376	102	94,194	94,579	100
July						
2	110,100	110,629	100	92,926	95,775	103
9	116,576	116,836	100	92,789	95,554	103
16	114,836	117,071	102	91,032	93,719	103
23	114,538	116,038	101	85,547	85,660	100
30	115,523	117,752	102	90,940	92,006	101
August						
6	115,408			89,006		
13	114,941			89,350		
20	114,503			89,772		
27	115,337			89,142		
September						
3	113,743			87,757		
10	109,421			88,239		
17	106,579			89,451		
24	110,720			87,579		
October						
1	115,518			84,773		
8	111,603			82,052		
15	103,037			86,178		
22	102,882			89,618		
29	113,485			88,300		
November						
5	116,808			81,113		
12	117,300			80,373		
19	117,500			88,265		
26	117,541			91,238		
December						
3	111,782			92,466		
10	116,382			92,395		
17	116,770			92,921		
24	115,926			88,058		

1/ 12 States: Ala., Ark., Calif., Del., Fla., Ga., Md., Miss., N.C., Pa., Tex., and Va.

2/ Weeks in 1988 and corresponding weeks in 1987.

favorable net returns, and with grain prices likely reaching their peak for 1988–89 in August 1988, broiler producers could fill the gap in total meat supplies.

Tempering the expansive production forecast is the estimate of the broiler hatchery supply flock. Broiler pullets placed in the broiler hatchery supply flock 7–14 months earlier provide an estimate of broiler egg laying capacity in the future. The estimate of the broiler hatchery supply flock for January 1989 is 4 percent below a year earlier.

August will probably set the tone for feed prices in the coming year and September will be a bellwether for how much broiler prices will fall during the off-season, between Labor Day and Memorial Day. If the forecast is favorable, producers will probably begin to build their hatchery supply flocks. Even with the below previous-year projection of the broiler hatchery supply flock, producers can probably maintain the production increase at the 1–3 percent level for first-quarter 1989 by molting their flocks.

If broiler prices are favorable and red meat production is below 1988 levels, second-quarter production will probably be about 4 percent higher than in 1988. Third- and fourth-quarter production will probably increase 5 to 6 percent with the entire year averaging about 4 percent above 1988. Per capita consumption is expected to rise to more than 64 pounds during 1989, more than 3 percent above 1988 levels.

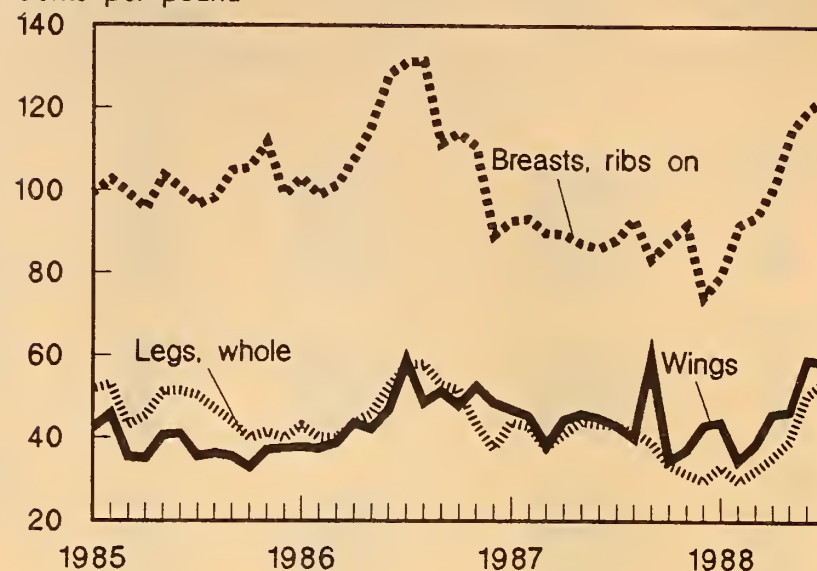
Prices Higher

The 12-city composite broiler price averaged 67 cents per pound in July compared with 47 cents a year ago and was in the mid 60's during early August. Broiler prices might range from 61 to 65 cents per pound during the third quarter, as summer barbecuing and other seasonal demand factors keep prices well above a year ago through Labor Day. Fourth-quarter prices will decline seasonally, averaging 50–56 cents. The average price for 1988 is expected to be 53–56 cents.

Prices during 1989 are expected to remain near those in 1988, averaging 50–56 cents. First-quarter prices, at 49–55 cents per pound, will remain near fourth-quarter 1988,

Wholesale Chicken Parts Prices, Northeast

Cents per pound



but be well above the year-earlier price of 45 cents. With low red meat supplies, broiler prices should rise from the first quarter during the second and third quarters to 53–59 cents. Prices will probably fall seasonally in the fourth quarter to 47–53 cents.

Turkeys

Net Returns Positive After Year of Losses

Turkey producers are expected to reduce production during second-half 1988 after experiencing negative quarterly net returns for an entire year. According to preliminary figures, net returns turned positive during July for the first time since December 1987 and are expected to be positive but narrowing during the rest of 1988. Higher feed costs will begin to narrow margins in September.

Production in First-half 1988 Increases

Production during 1988 is expected to increase 4–5 percent after increasing 19 percent in 1987. Cumulative placements for 1988 slaughter since September 1987 were only 2 percent ahead of a year ago. January–June 1988 production, at 1.8 billion pounds, was about 18 percent ahead of the same period a year earlier. Average liveweights increased nearly 3 percent from a year ago. Production during the second quarter, at 13 percent above a year earlier, slowed dramatically from the first quarter when production was 25 percent above a year earlier.

Table 41--Federally inspected turkey slaughter, 1987-88

Year	Number	Average weight	Live-weight	Certified RTC
	Millions	Pounds	- Million Pounds -	
1987				
I	40.9	20.67	846.7	670.1
II	55.5	19.70	1,093.2	866.8
III	69.9	19.88	1,389.4	1,099.0
IV	64.8	21.07	1,364.1	1,080.9
Year	231.0	20.33	4,691.1	3,714.9
1988				
I	50.3	21.0	1,049.8	836.6
II	59.8	20.6	1,237.3	978.7
III				
IV				
Year				

Production To Slow

Poult placements indicate production will slow significantly in the third quarter to 5 percent below a year earlier. Similarly, fourth-quarter production will probably fall 5 percent as producers face higher feed costs. The August *Turkey Hatchery* report indicated that placements during March-July 1988 were almost 6 percent below a year earlier.

Modest Increase in 1989 Production Forecast

With positive net returns expected during third- and fourth-quarter 1988, turkey production in 1989 is expected to increase approximately 1 percent. The turnaround from year-over-year production decreases in second-half 1988 is expected by second-quarter 1989 if profit potentials look positive when the corn and soybean crops have been harvested this fall. Year-over-year production increases will become larger as the year progresses. With projected per capita pork supplies below fourth-quarter 1988 levels, prospects for higher prices and good net returns prevail.

Cold Storage Stocks Above 1987 Levels

Turkey stocks, at 467 million pounds on July 1, were approximately 22 percent greater than a year earlier. Beginning fourth-quarter stocks are expected to be about 575 million

Table 42--Turkey hatchery operations, 1985-88 1/

Month	Total turkey placed 2/			Eggs in incubators first of month, changes from previous year		
	1985-86	1986-87 3/	1987-88	1985-86	1986-87	1987-88
	-- Thousands --			-- Percent --		
Sept.	10,661	13,620	15,024	+20	+18	+16
Oct.	12,451	14,135	16,743	+8	+17	+18
Nov.	12,648	13,836	17,714	+13	+11	+21
Dec.	14,448	17,705	19,956	+17	+18	+15
Jan.	17,204	21,646	22,307	+8	+27	+9
Feb.	18,608	21,265	23,059	+13	+14	+8
Mar.	20,761	25,401	25,043	+8	+19	+3
Apr.	23,065	26,703	24,647	+10	+17	-2
May	24,337	26,623	25,313	+9	+16	-5
June	23,394	27,265	25,874	+10	+15	-4
July	22,310	25,999	23,851	+13	+19	0
Aug.	16,405	19,889		+8	+22	-4

1/ Breakdown by breed not shown to avoid disclosing individual operations.
2/ Excludes exported poult. 3/ Includes revised calendar year 1987 numbers.

pounds, about 10 percent below the record levels of 1987. Whole turkey cold storage stocks on July 1 were 71 percent of the total turkey cold storage holdings, compared with 76 percent in 1987. Processing stocks appear to be growing faster than whole turkey stocks, indicating the further processed industry has not found increased outlets as fast as production has increased.

Per Capita Consumption To Dip

Per capita consumption during the fourth quarter is expected to total 5.9 pounds per person, 2 percent below fourth-quarter 1987 because of declining production and higher prices. For 1988 per capita consumption is expected to rise 9 percent to around 16.5 pounds. With 1989 production projected to increase 1 percent, per capita consumption is expected to remain near 1988 levels. Fourth-quarter per capita figures are estimated to fall below year-earlier levels by 1 percent to just below 6 pounds. This will mean that more turkey meat will be consumed in the first three quarters, continuing the trend towards less seasonal consumption of turkey. First-quarter consumption is expected to be 19 percent of total annual consumption, with second and third quarters equaling 22 and 23 percent, respectively.

Turkey Prices Rising in 1988

Wholesale prices for hen turkeys in the eastern region averaged 51 cents per pound during the second quarter, down from 56 cents in 1987. However, prices in the eastern region have been rising since May and were 70 cents by mid-July and have remained there since.

Turkey prices are expected to continue rising seasonally as holiday buying activity picks up during the third and fourth quarters and production continues to slow. Eastern hen turkey prices will likely average 70-74 cents during the third quarter. Larger quantities of pork during the fourth quarter will likely dampen wholesale turkey prices. They will probably average 74-80 cents during the fourth quarter. Prices during 1988 are expected to average 61-64 cents, above the 58 cents in 1987.

Turkey Prices To Increase During 1989

Turkey prices during 1989 will likely be above 1988 levels as total per capita meat supplies will be below a year earlier. With projected first-quarter production below a year earlier, prices in the first quarter are expected to average 62-68 cents, substantially above the 49 cents received in the first quarter of 1988. Prices will probably drop seasonally from the first quarter to 58-64 cents in the second quarter and rise seasonally

through the rest of the year. Turkey prices during 1989 are projected to average 68-74 cents.

Eggs

Table Egg Production Down

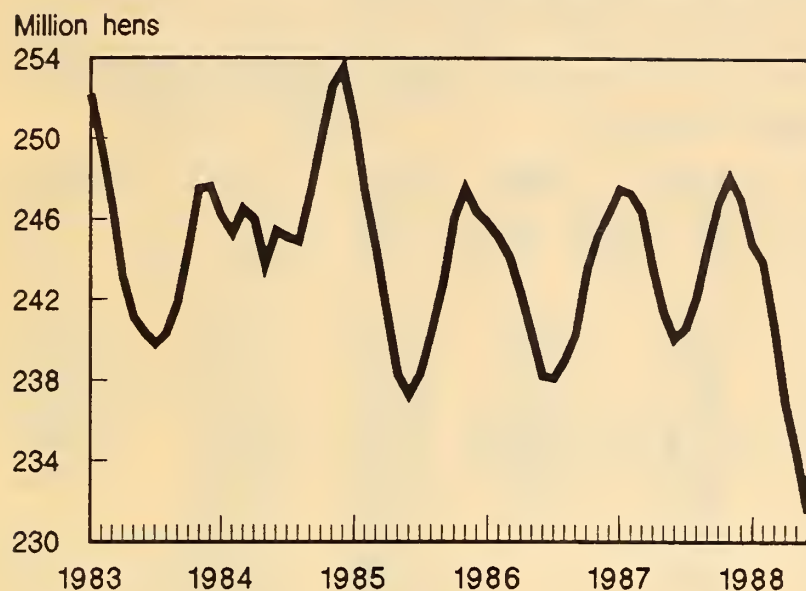
The most recent cyclical peak in the table laying flock occurred in November 1987. Between then and June 1988, the flock has been downsized by nearly 7 percent, or 16 million hens. Although this is not the largest flock reduction in the recent past (there was a reduction of over 7 percent from December 1984 to June 1985), the table laying flock during June was the smallest since the data series began in 1981. The outlook for the near-term calls for only modest month-to-month growth in the flock from the seasonal low, given May and June egg-type hatch numbers which were 12 and 11 percent below a year earlier, respectively. Also, the July 1 estimate of egg-type eggs in incubators was 23 percent below the year-ago level.

Table 43---Turkey prices and price spreads, 1986-88

Item	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
Cents per pound													
Farm price 1/													
1986	35.6	36.3	36.9	38.1	40.9	45.9	49.3	50.9	51.4	53.0	51.5	43.0	44.4
1987	34.9	35.3	37.6	36.5	35.0	34.5	33.1	31.4	30.8	29.9	33.7	38.1	34.2
1988	31.8	29.0	28.2	28.4	29.7	31.6	39.4						
New York, hens 8-16 lbs 2/													
1986	60.3	61.7	63.9	64.6	67.1	73.8	77.9	80.5	81.2	83.2	80.7	71.1	72.2
1987	55.3	58.5	60.3	58.3	55.3	55.7	56.3	56.1	56.1	54.7	60.7	66.5	57.8
1988	52.8	47.1	47.0	46.9	49.2	57.1							
4-region average retail price													
1986	106.3	107.8	104.8	104.2	103.4	102.3	105.6	109.5	111.9	112.9	108.1	102.1	106.6
1987	103.6	103.2	103.0	100.4	102.8	105.1	105.8	105.1	103.3	102.6	90.0	89.3	101.2
1988	93.1	92.9	91.0	89.4	92.9	92.9							
Price spreads													
Retail-to-consumer													
1986	33.7	36.7	32.5	31.3	27.1	19.0	19.3	19.5	21.7	20.2	16.2	21.8	24.9
1987	39.8	37.4	35.4	33.4	37.3	40.1	41.1	41.8	39.0	38.3	22.0	13.5	34.9
1988	29.8	35.0	33.4	33.0	35.1	24.6							
1982-84 = 100													
Consumer pr. index 3/													
1986	111.6	112.5	111.1	109.7	110.5	109.8	110.9	111.7	114.5	117.1	113.9	112.3	112.1
1987	113.3	111.6	112.0	109.6	111.6	111.8	112.1	111.6	109.4	109.2	103.5	103.9	110.0
1988	107.7	107.2	107.2	107.5	108.3	109.3							

1/ Live weight. 2/ Wholesale, ready-to-cook. 3/ Other poultry CPI.

U.S. Table-Type Layer Flock



The reduction in the table-type laying flock has had a predictable impact on production. During the second quarter table egg production was down nearly 2 percent.

Egg prices moved sharply higher during mid-June to the end of July. In the 5 weeks between June 20 and July 29, wholesale grade 'A' prices in New York increased from 54.5 to 77.5 cents per dozen, or by over 42 percent. The price at the end of July was the highest since December 1986, while the first 2 weeks of August have seen declines back to the 70-cent area.

These higher prices appear to be spurring some adjustments by egg producers. In an apparent desire to take advantage of the recent price run-up, producers have slowed the rate of light-type hen slaughter, and put more hens into molt. Mature light-type hen slaughter during June was down about 6 percent from a year earlier, this following 7 months of equal or higher year-to-year slaughter levels. At the same time, hens being molted on the first day of June and July 1988 were 7.6 and 6.0 percent of the flock, respectively. This compares with 6.4 and 4.7 percent a year earlier. One interpretation of all current data is that producers view the recent price strength as temporary. If the market perception of the price move was otherwise, we would expect to have seen a sharp increase in the egg-type eggs in incubators and hatch numbers.

Table 44--Layers on farms and eggs produced, 1987-88 1/

Quar- ters	Number of layers		Eggs per layer		Eggs produced	
	1987	1988	1987	1988	1987	1988
	- Millions -		- Number -		Million dozen	
I	282	283	61.0	62.2	1,434.6	1,466.9
II	280	275	63.1	63.4	1,472.1	1,453.1
III	277		62.1		1,432.7	
IV	283		61.6		1,451.7	
Annual	280		247.8		5,791.0	

1/ Marketing year beginning December 1.

For the remainder of 1988, production is expected to be well below a year earlier, due to the much smaller laying flock.

Total Egg Production Expected Down

For the first half of the year, total egg production (table- and hatching-types) was virtually unchanged from a year earlier. Third-quarter production is projected at 1,400 million dozen, a decline of nearly 3 percent from a year earlier. For the fourth quarter, a seasonal decline of over 3 percent is expected. For 1989, another year-to-year decline is projected, as expected production declines nearly 1 percent. First-quarter 1989 output is put at 3 percent below a year earlier, as the effects of a much reduced laying flock persist.

Prices Up Sharply

New York grade 'A' large eggs at wholesale rose sharply and averaged 74 cents per dozen in July, after averaging 53 cents in the second quarter. For the third quarter as a whole, prices are expected to average 70 to 74 cents. Fourth-quarter prices are expected to strengthen to 71-77 cents. For all of 1988, prices are expected to average 62 to 65 cents per dozen. The 1989 outlook calls for wholesale New York prices to average 70-76 cents per dozen.

Table 45--Force moltings and light-type hen slaughter, 1986-88

Month	Force molted layers 1/						Light-type hens slaughtered under Federal inspection 2/ (Number of Head)		
	Being molted			Molt completed					
	1986	1987	1988	1986	1987	1988	1986	1987	1988
	- - - - Percent - - - -						- - - Thousands - - -		
January	3.6	4.2	3.8	25.2	20.9	20.9	13,890	13,004	13,587
February	4.8	4.6	5.0	23.5	19.1	20.4	12,221	13,196	13,993
March	4.2	3.8	3.8	24.4	20.1	20.6	14,201	13,451	14,466
April	2.8	2.8	3.9	24.0	19.6	19.4	14,761	14,752	13,948
May	5.4	5.4	5.9	22.1	18.8	18.7	13,277	12,747	13,948
June	4.4	6.4	7.6	22.8	18.5	20.0	14,875	13,933	13,122
July	5.4	4.7	6.0	21.9	20.5	21.3	12,280	12,481	
August	3.9	4.9		21.4	21.0		11,682	12,518	
September	3.9	5.3		20.8	21.7		11,185	10,814	
October	4.7	4.9		20.2	21.3		12,450	12,055	
November	4.2	4.2		20.7	21.4		10,019	11,410	
December	2.5	3.4		22.0	22.4		12,975	15,957	

1/ Percent of hens and pullets of laying age in 15 selected States. 2/ Revisions include data from late reports or other corrections developed by the Food Safety and Inspection Service.

Table 46--Egg-type chick hatchery operations, 1986-1988

Month	Hatch			Eggs in incubators first of month, changes from previous year		
	1986	1987	1988	1986	1987	1988
	- - Thousands - -			- - Percent - -		
Jan.	34,538	34,156	29,472	13	5	-4
Feb.	34,826	35,815	28,468	25	4	-24
Mar.	38,523	41,708	34,743	11	5	-17
Apr.	42,359	42,356	35,051	5	-2	-17
May	42,465	40,858	35,824	8	1	-16
June	37,253	37,256	32,987	6	1	-7
July	33,575	33,375		10	-4	-23
Aug.	33,382	34,667		4	8	
Sept.	32,638	31,800		2	4	
Oct.	32,444	33,959		-4	9	
Nov.	27,456	30,593		-16	10	
Dec.	33,262	31,242		-3	-7	

Net Returns Expected Negative in Third Quarter

Third-quarter 1988 net returns are projected to be negative 2 to 3 cents per dozen. Given the current projections for eggs, soymeal, and corn, net returns are forecast to be near breakeven from fourth-quarter 1988 through second-quarter 1989. Third-quarter 1989 net returns are expected to be modest, and a strong fourth quarter is projected.

U.S. Poultry Trade

Broiler Export Volume Up

Broiler exports during January-May 1988, at 292 million pounds, were up 7.3 percent from a year earlier and value increased 1.5 percent to \$134.9 million. Export unit values were down 5 percent from a year earlier, to 46 cents per pound. Parts made up 85 percent of broiler exports compared with about 80 percent a year ago.

Sales to Japan during January-May were 38 percent above a year ago, and represented one-third of total U.S. broiler exports compared with one-fourth during the first 5 months of 1987. Hong Kong, Singapore, Jamaica, and Mexico were other large markets with increased purchases. Canada, however,

Table 47--Egg prices and price spreads, 1986-88

Item	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
Cents per dozen													
Farm price 1/													
1986	58.3	54.0	61.4	49.2	48.8	42.1	51.9	55.3	55.4	50.3	60.0	58.3	53.8
1987	51.5	50.0	46.0	46.5	40.1	41.2	41.8	40.9	51.3	41.4	46.9	38.8	44.7
1988	39.7	37.6	41.2	36.0	32.9	36.5	49.4						
New York (cartoned) 2/ Grade A, large													
1986	73.3	68.3	80.8	65.7	65.2	59.2	73.0	72.8	72.6	69.6	77.2	75.5	71.1
1987	67.1	65.2	62.0	62.4	55.6	58.7	59.1	63.2	68.3	60.2	60.5	56.9	61.6
1988	55.9	52.7	56.4	52.1	50.9	56.8	73.7						
4-region average, Grade A, large Retail price													
1986	90.1	86.6	88.7	89.0	82.0	79.5	83.3	91.3	86.8	85.5	89.7	91.0	87.0
1987	86.2	82.3	80.0	78.6	76.3	71.1	76.3	73.0	83.7	77.8	80.5	73.1	78.3
1988	76.0	71.8	74.0	71.9	67.8	70.5							
Price spreads													
Retail-to-consumer													
1986	14.9	17.2	10.0	21.9	16.8	20.5	12.1	18.8	14.3	15.4	11.7	14.4	15.7
1987	17.4	14.5	16.5	15.3	20.8	12.7	16.4	15.7	13.6	18.4	18.4	15.4	16.2
1988	20.9	18.2	14.9	18.8	16.5	13.0							
1982-84 = 100													
Consumer price index													
1986	101.5	97.4	99.6	98.5	90.7	87.1	91.4	100.7	97.1	97.2	102.2	103.7	97.3
1987	100.8	97.8	93.9	91.1	88.5	84.1	87.8	85.8	97.6	91.4	93.9	85.5	91.5
1988	90.1	85.5	87.9	85.0	81.8	83.6							

1/ Market (table) eggs including eggs sold retail by the producer; data not available prior to 1982.

2/ Price to volume buyers.

imported about 20 percent less than a year earlier, because of large domestic stocks.

Sales to Iraq, a large importer under the Export Enhancement Program (EEP) during 1987, were down sharply. Iraq's last purchase was 7.7 million pounds in January, compared with 21.2 million during January-May 1987. Egypt, another large importer under EEP, reduced its 1988 imports to 16.9 million pounds during January-May, down 52 percent from a year ago. Both countries are attempting to increase domestic production of broilers and have restricted imports.

Outlook for Slower Broiler Exports

U.S. broiler exports will face more intense price competition during the remainder of 1988 and during 1989. The sharp increases in U.S. broiler prices have not occurred in Europe. In addition, EC export

subsidies are nearly 50 percent above a year earlier. Unlike during 1987, the dollar recently has not been dropping in value in relation to European currencies.

Exports under the EEP during 1988 will account for less than 10 percent of total broiler exports, in contrast to 26 percent in 1987. Restrictions placed on imports by Iraq and Egypt are partly responsible for reduced EEP sales. But higher, less competitive offering prices by the United States are also a factor. Sales to Japan and other Far East markets are expected to remain strong and should hold the reduction in 1988 to about 10 percent below the 1987 record.

During 1989 U.S. prices are expected to be relatively high, with exports slightly below 1988. EEP sales are likely to remain low unless U.S. export bonuses are increased or the EC reduces its subsidies. If EEP sales were

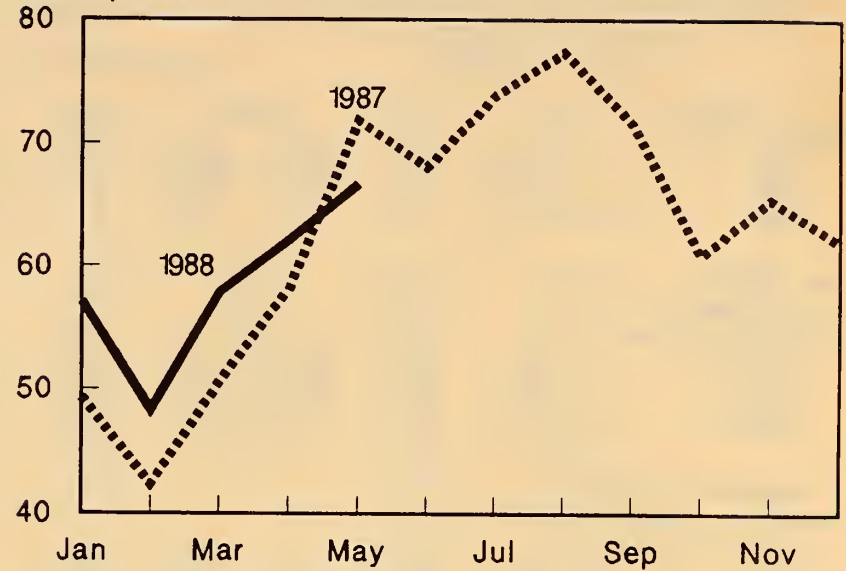
Table 48--Shell eggs broken and egg products produced under Federal inspection, 1987-88

Period	Shell eggs broken	Egg products produced 1/		
		Liquid 2/	Frozen	Dried
	Thou. doz.	Thou. lbs.	Thou. lbs.	Thou. lbs.
1987				
January	73,724	23,567	29,042	8,981
February	71,122	22,371	27,250	8,159
March	80,467	26,343	31,909	8,725
April	74,135	23,231	27,750	8,428
May	77,451	23,121	28,307	9,242
June	85,391	27,478	27,781	9,788
July	86,461	23,730	30,972	9,622
August	79,928	25,061	27,454	8,356
September	78,419	27,371	28,455	7,157
October	81,959	28,644	34,433	8,504
November	73,557	22,542	29,511	8,037
December	79,469	21,367	34,530	9,337
Jan.-June	462,290	146,111	172,039	53,350
1988				
January	74,629	24,055	26,050	8,973
February	75,240	24,470	26,412	8,649
March	81,978	27,153	28,412	7,712
April	78,725	26,516	28,209	9,487
May	88,484	29,635	33,072	10,226
June	93,003	30,076	37,251	9,034
July				
August				
September				
October				
November				
December				
Jan-June	492,059	161,905	179,406	54,081
Jan.-June Pct. Chg. Yr-on-Yr	+6.4	+10.8	+4.3	+1.4

1/ Includes ingredients added. 2/ Liquid egg products produced for immediate consumption.

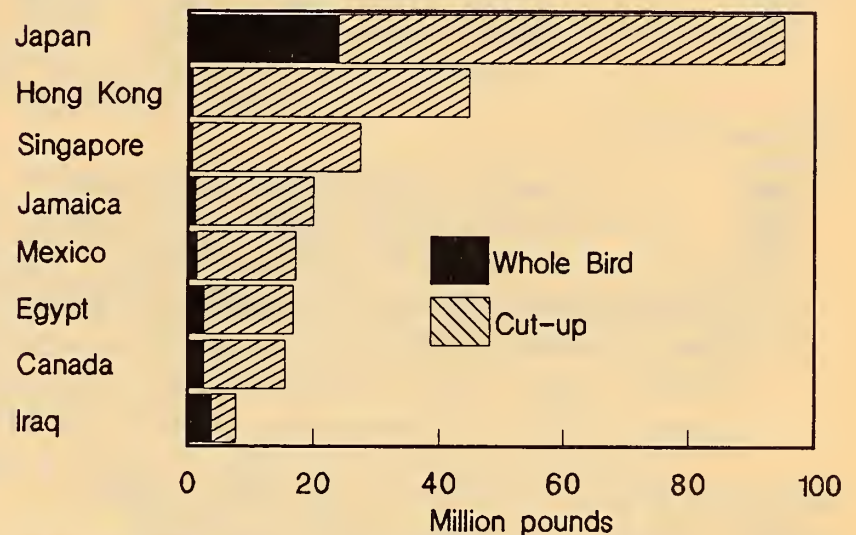
U.S. Broiler Exports

Million pounds



Major Markets for U.S. Broilers

Top 8 U.S. broiler importers



January-May 1988.

Table 49--Egg Supply and Utilization (Population includes Military) 1/

Year	Pro- duction	Beginning stocks	Breaking egg use	Imports 2/	Total supply	Exports	Ship- ments	Hatching egg use 3/	Ending stocks	Consumption Per	
										Total	capita
<u>Million dozen</u>											
<u>Total Eggs</u>											
1986											
I	1,420.6	10.7	---	3.6	1,434.9	26.0	7.5	139.2	8.7	1,253.6	62.5
II	1,417.8	8.7	---	4.0	1,430.5	22.4	5.8	145.1	11.9	1,245.4	62.0
III	1,410.5	11.9	---	2.2	1,424.6	29.0	7.5	141.4	11.5	1,235.2	61.3
IV	1,456.1	11.5	---	3.9	1,471.4	24.2	7.2	141.2	10.4	1,288.4	63.8
Year	5,704.9	10.7	---	13.7	5,729.3	101.6	28.0	566.8	10.4	5,022.5	249.5
1987											
I	1,440.4	10.4	---	2.6	1,453.4	23.6	7.3	147.6	11.9	1,263.0	62.4
II	1,438.4	11.9	---	1.2	1,451.6	23.7	4.8	154.2	13.8	1,255.0	61.9
III	1,438.5	13.8	---	1.0	1,453.3	21.5	6.1	147.8	13.5	1,264.3	62.2
IV	1,479.2	13.5	---	0.8	1,493.4	42.4	6.9	146.4	14.4	1,283.3	63.0
Year	5,796.5	10.4	---	5.6	5,812.5	111.2	25.1	596.0	14.4	5,065.7	249.4
1988 4/											
I	1,463.6	14.4	---	.9	1,478.8	33.7	5.8	150.2	12.9	1,276.4	62.4
II	1,414.9	12.7	---	.8	1,428.4	33.0	5.0	153.5	20.2	1,221.7	59.6
III											
IV											
<u>Shell Eggs</u>											
1986											
I	1,420.6	0.7	187.8	3.0	1,236.5	5.7	7.3	139.2	0.6	1,083.8	54.0
II	1,417.8	0.6	227.0	3.3	1,194.7	6.9	5.5	145.1	1.1	1,036.1	51.5
III	1,410.5	1.1	225.1	1.2	1,187.7	6.4	7.1	141.4	0.9	1,032.0	51.2
IV	1,456.1	0.9	217.6	3.4	1,242.7	6.9	6.9	141.2	0.7	1,087.0	53.8
Year	5,704.9	0.7	857.4	11.0	4,859.2	25.9	26.8	566.8	0.7	4,238.9	210.6
1987											
I	1,440.4	0.7	225.3	1.9	1,217.7	7.1	7.0	147.6	1.0	1,055.1	52.1
II	1,438.4	1.0	237.0	0.1	1,202.5	8.9	4.8	153.7	1.0	1,034.2	51.0
III	1,438.5	1.0	242.8	0.1	1,196.8	8.3	6.0	147.8	1.0	1,033.7	50.9
IV	1,479.2	1.0	235.0	0.1	1,245.3	24.3	5.9	146.4	1.3	1,067.4	52.4
Year	5,796.5	0.7	940.1	2.3	4,859.4	48.6	23.7	595.5	1.3	4,190.3	206.3
1988 4/											
I	1,463.6	1.3	231.8	0.1	1,233.1	16.0	5.8	150.2	2.0	1,059.1	51.8
II	1,414.9	2.0	260.2	0.2	1,156.9	13.0	5.0	153.5	0.9	984.5	48.0
III											
IV											

1/ Totals may not add due to rounding. 2/ Shell eggs and approximate shell-egg equivalent of egg products. 3/ Hatching for 1986-present calculated by the new method. 4/ Preliminary.
 --- Not applicable for total egg supply and utilization.

Table 50--U.S. Broiler Exports to Major Importers, January-May, 1987-1988

Country or area	1987	1988
<u>1000 lb</u>		
Japan	68,968	95,310
Hong Kong	40,091	44,714
Singapore	20,676	27,496
Jamaica	18,246	20,032
Mexico	9,948	17,152
Egypt	34,904	16,798
Canada	19,210	15,482
Iraq	21,239	7,693
Netherlands Antilles	6,413	5,049
Spain	1,404	4,312
Other	31,200	38,086
Grand Total	272,299	292,124

Table 51--U.S. Turkey Exports to Major Importers, January-May, 1987-1988

Country or area	1987	1988
<u>1000 lb</u>		
Federal Rep. of Germany	1,205	4,030
Egypt	636	3,097
Taiwan	102	2,894
Japan	409	1,262
Mexico	445	1,028
Canada	3,082	1,008
French Polynesia	0	873
Hong Kong	529	851
Western Samoa	903	709
Ivory Coast	90	707
Other	3,398	3,923
Grand Total	10,799	20,382

ended, exports in 1989 could drop nearly 20 percent from the 1987 level.

Turkey Parts Lead Export Growth

During January–May 1988, U.S. turkey exports increased 89 percent above a year earlier to 20.4 million pounds, and value increased 57 percent to \$8.74 million. Unit export values, at 43 cents per pound, were 17 percent below a year earlier. Leading U.S. turkey importers (West Germany, Egypt, Taiwan, Japan, and Mexico) had large increases over a year earlier.

Low U.S. prices for turkey meat boosted exports for the first 5 months of 1988. In July prices moved sharply higher and are expected to remain higher during the rest of 1988 and in 1989. The export of low-priced parts is an important component of the trade. Turkey parts, at 41 cents per pound, 35 percent cheaper than whole turkey, made up nearly 90 percent of turkey exports, compared with about 82 percent a year earlier. Early in 1988 the average wholesale price of turkey drumsticks was less than 20 cents per pound, but increased to 28 cents by July.

Given the strong start in 1988, turkey exports for the year should still exceed 1987's 33 million pounds by 15 to 20 percent. Until Taiwan banned imports of U.S. turkey parts earlier this year it was a leading importer of U.S. turkey. Results of negotiations to bring about removal of the ban will obviously play a role in future U.S. exports. Overall, with 1989 U.S. prices expected above 1988, the prospects

are that 1989 turkey exports will be about 5 percent lower than 1988.

Egg Exports Boosted by Japan's Purchases

During January–May total egg exports increased 45 percent over the same period last year, to 56.5 million dozen worth \$45.4 million. Japan alone took the equivalent of 25.3 million dozen in egg products worth \$12.3 million and it accounted for 80 percent of U.S. egg product exports. Canada was next with 5 percent.

Table egg exports increased 127 percent during January–May 1988 to 14.3 million dozen. The export unit value declined about 8 percent from a year earlier to 61 cents per dozen. However, during April and May unit values increased to an average of 67 cents. Hong Kong, with nearly 6 million dozen, continues to be the leading buyer of table eggs, and the EEP plays a large role. Iraq has expanded domestic production and stopped importing table eggs under EEP, but it has become a large importer of hatching eggs (2.6 million dozen in January–May) under a GSM–103 credit. Canada continued to be the major U.S. hatching egg importer with 3.3 million dozen during this period.

Egg Exports Up in 1988 But Likely To Drop in 1989

Higher U.S. egg prices expected in the second half of 1988 and also in 1989 are expected to slow the rapid export growth that

Table 52--U.S. Mature Chicken Exports to Major Importers, January–May, 1987–1988

Country or area	1987	1988
	1000 lb	
Japan	334	2,228
Canada	2,279	1,055
Kuwait	15	937
Mexico	1,697	526
Singapore	7	493
Hong Kong	12	415
Dominican Republic	0	402
United Arab Emirates	46	311
Jamaica	1,500	308
Egypt	1,185	307
Other	1,214	1,711
Grand Total	8,289	8,693

Table 53--U.S. Egg Exports to Major Importers, January–May, 1987–1988 1/

Country or area	1987	1988
	1000 dozens	
Japan	21,281	25,562
Iraq	0	6,884
Hong Kong	4,090	6,031
Canada	6,236	5,773
Mexico	433	1,809
United Arab Emirates	0	1,422
Federal Rep. of Germany	370	1,203
South Korea	69	1,038
Jamaica	705	944
Switzerland	384	633
Other	5,421	5,235
Grand Total	38,989	56,534

1/ Shell, and shell equivalent of egg products.

began in the last quarter of 1987. Prices in several other countries including competitors in the EC, have so far remained stable or dropped while U.S. prices have increased over 1987 and early 1988. The EC has also increased its egg export bonuses about 30 percent to EEP markets, compared with 1987.

U.S. egg exports during 1988 are projected to be about 120 million dozen, about 10 percent above 1987 levels. Strong sales of egg products to Japan are playing a major role. Table egg sales under EEP are likely to be about 25 percent below 1987, due mainly to a big drop in imports by Iraq. Hatching eggs sold under an export credit program will keep

total 1988 egg exports to Iraq at near the 1987 level. EEP exports to Hong Kong and the Near East should be above 1987 levels. Total EEP exports in 1988 could account for about 12 percent of total egg exports, compared with 16 percent in 1987.

During 1989, egg exports are projected to drop about 12 percent from 1988 as the U.S. competitive position is expected to weaken relative to early 1988. EEP sales could drop to less than 10 percent of total exports. Payment of higher EEP bonuses or lower EC export bonuses would result in a higher projection. Should EEP sales end, exports in 1989 would likely drop 15 to 20 percent from 1988 levels.

CHOICE BOXED BEEF WHOLESALE VALUE SERIES

by

Lawrence A. Duewer*

Abstract: Beef carcasses are now cut (divided) into smaller pieces earlier in the marketing channel. Most beef leaves the packing plant as primals or subprimals. When beef is cut, vacuum packaged, and transported in boxes it is called boxed beef. Current Choice beef price spreads still use a carcass value as the wholesale price, but little beef is wholesaled as carcasses. The boxed beef wholesale value series being introduced will replace the carcass value in the Choice beef price spread series. The change is expected as soon as other details of overall changes in price spreads are completed.

Keywords: Beef, wholesale value, price spreads, boxed beef, national wholesale price.

Choice Boxed Beef Wholesale Value Series

To provide better information for analyzing the cattle-beef industry a Choice boxed beef value series has been developed. This follows the recommendations of several individuals and an ERS-CED Task Force

Report. 1/ In addition to its value as a separate series it will be used as the middle, or wholesale, value in the Choice beef price spread series.

The beef industry has expanded the proportion of breaking and cutting of beef at the packing plant during the last 25 years. At

*Agricultural Economist in the Commodity Economics Division of the Economic Research Service, USDA.

1/ U.S. Department of Agriculture, Commodity Economics Division. *Issues and Options Related to the Reporting and Analysis of Retail Prices and Price Spreads for Beef*. ERS Staff Report No. AGES871102, January 1988.

least four-fifths of all steer and heifer beef is now shipped from the packing plant in boxes (as primals, subprimals, or retail cuts) and almost 95 percent is cut before it enters the local retail store.

The wholesale or middle value in the Choice beef price spread series has continued to be measured based on prices of uncut carcasses. In a few months, a boxed beef value will replace the carcass value as the middle value in estimating price spreads for Choice beef. This is necessitated not only by the shift in the volume of movement, but also because carcass price series are becoming fewer and less reliable. The development of the Choice boxed beef wholesale value series is a first step to its incorporation into the spread series.

USDA's Agricultural Marketing Service (AMS) publishes boxed beef cut-out values daily in its *National Carlot Meat Report*. AMS also publishes the weekly average price for the Choice, Yield Grade 1-3, 550-700 pound boxed beef cutout in its weekly *Livestock Meat Wool Market News*. Of the three cutout composites AMS releases, the Choice 550-700 pound composite most nearly represents the Choice beef purchased by retail stores. AMS's composite is a weighted average of prices of major, minor, and byproduct cuts that are normally cut from a carcass. AMS updates the cuts and weights periodically as industry practices change. The last update was January 1, 1988.

Use of the AMS boxed beef composite in the price spread series requires some adjustments as retailers do not buy the fat, bone, and shrink that are weighted in by AMS as part of the boxed beef composite. The AMS cutout value reflects the sale of the total carcass by the packer (even though all of the packers sales are not to retail grocers). An adjustment is also required because retailers prefer to buy leaner trimmings than the 50 percent lean and 50 percent fat (50/50) trim weighted in by AMS. With 50/50 trim retailers would need a good source of lean beef to mix in to obtain at least a 70-percent lean product (ground beef) as required by law. The price spread series estimates the average prices or values for the United States at each market level, while the published AMS boxed beef value is based on Omaha. The Omaha value

quoted by AMS is thus adjusted with an average transportation differential to obtain an estimate of the U.S. average value for boxed beef.

Adjustment Details

The boxed beef composite value was developed mainly to provide a more representative middle value for estimating price spreads. To obtain the value for an equivalent quantity of products at wholesale or other market levels, the appropriate cuts products and their matching conversion factors must be determined. Less than one-half of the original weight of cattle is eventually sold as retail cuts. The current, "old", and the "new" breakdown of the live animal to retail cuts and the related conversion factors are presented in figure 1 using a 1,000-pound steer as an example for easy computations. Procedures are required to allow for the live-to-carcass dressing percentage, the carcass to boxed conversion factor, the converting of the boxed value to retail equivalent (including allowance for retail shrink), the byproduct quantity and value, and the transportation differential. Estimates of fat trim and the amount of boneless cuts are also made in estimating the boxed beef composite value.

Live to Carcass Dressing Percentage

In the 1978 price spread changes, the live to carcass dressing percentage was changed from 62 to 61.5 percent, reflecting somewhat less finish on cattle marketed. At the same time we further specified the product for which we were calculating spreads to Choice, Yield Grade 3 from the more general description of Choice. The most common grade of beef marketed is still Choice, Yield Grade 3, although an increasing amount of Choice YG 2 cattle are being marketed. Thus the 61.5 dressing percentage will continue to be used.

The Carcass to Boxed Conversion Factor

AMS boxed beef cutout values are constructed to reflect the value per pound of beef carcass. Some of these boxed beef items are not purchased by retailers even though the cuts are a part of the carcass and are sold by packers. The items listed in table 1 are most of those included in the AMS boxed beef

cut-out value. The remaining three categories (fat, bone, and cutting loss) were those assumed not to be purchased by retailers. Their combined weight is 24.53 percent of the carcass weight.

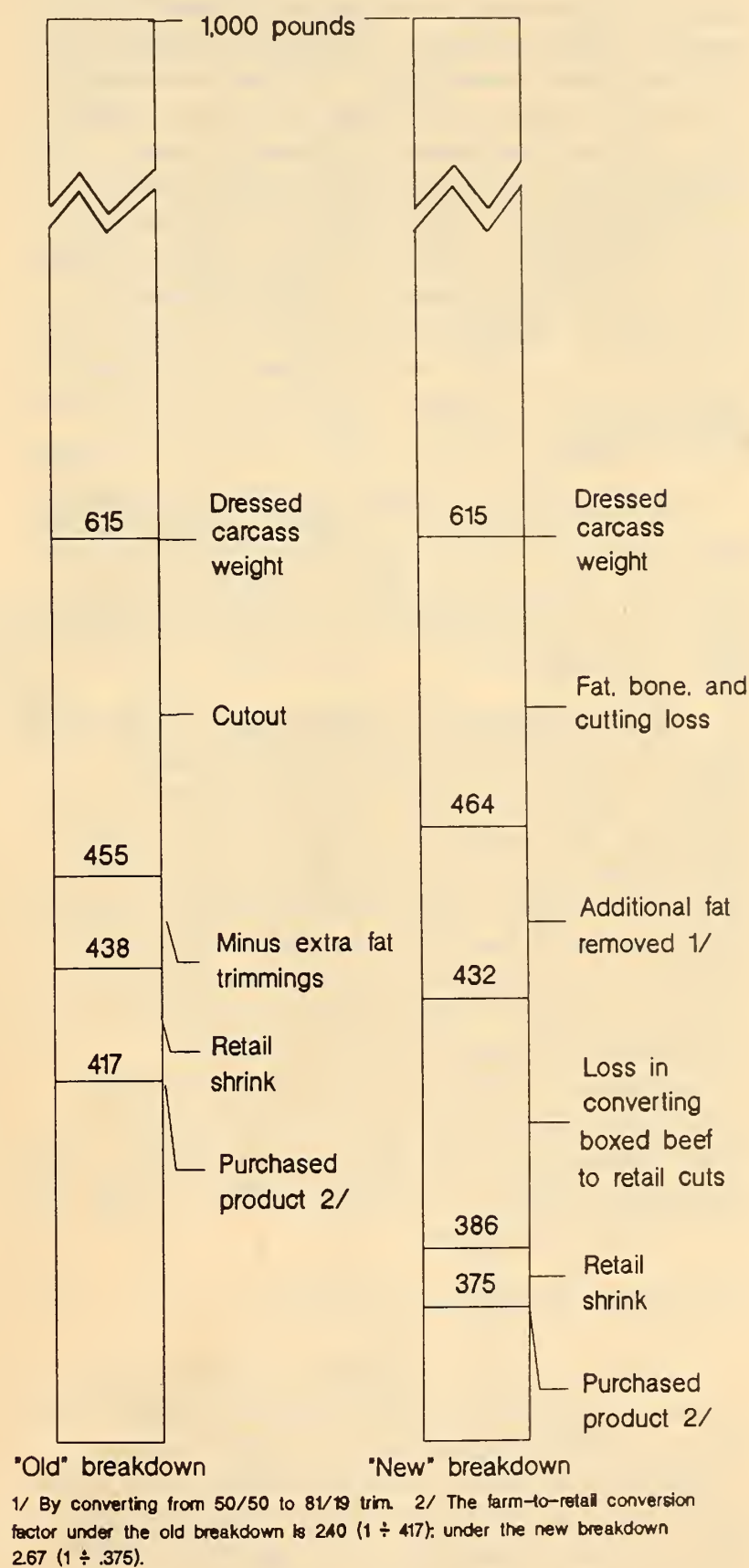
Retailers buy most of the other cuts (items) listed, although in many cases their purchases are not in the same proportion as the cuts are found in the carcass. Thus, using carcass weight proportions may well mean the value received by packers for the carcass value of boxed beef differs from the average value per pound that retailers pay for beef. Since we are trying to compare values at three levels in the market channel (live, wholesale, and retail) it is important we keep the same carcass weighting proportions at each point.

One other departure from marketing practices (for conversion factor and byproduct value purposes) is made in the carcass to boxed beef conversion factor computation. Retailers do not sell ground beef with 50 percent fat. The maximum fat content retailers can sell is 30 percent. The 13.70 percent weight of 50/50 (50 percent lean and 50 percent fat) trim is thus separated into 8.46 percent of 81/19 (81 percent lean and 19 percent fat) trim with the (on paper) removal of 5.24 percent fat. Adding this 5.24 percent fat to the 24.53 percent weight for fat, bone, and cutting loss previously removed makes a total of 29.77 percent of the carcass weight assumed not to be purchased by retailers. This implies that the carcass to boxed conversion factor is 1.424 ($1/1 - .2977$). The calculation of the boxed beef price or value is, however, not changed (The composite price is still calculated as 13.70 percent of carcass weight times the 50/50 trim price as obtained from the AMS daily boxed beef cutout report.) The boxed beef weighted price of all items is then multiplied times the carcass to boxed beef conversion factor of 1.424 to obtain the boxed beef wholesale value (carcass proportion) on a wholesale weight basis. The 1.424 is obtained, using figure 1, as 615 (the pounds of carcass from a 1,000 pound steer) divided by 432 (the pounds of wholesale boxed beef per 1,000 pound steer).

Converting the Boxed Value to a Retail Equivalent

Choice beef price spreads are usually reported on a retail weight equivalent basis.

Adjustment from a Live 1,000-lb. Steer to Retail Pounds of Choice Beef



To convert the carcass or wholesale weight basis boxed value to a retail pound equivalent basis, the poundage loss between what the retailer buys and sells must be considered. Table 1 lists the various cuts, products, and losses into which the subprimals and products the retailer purchases are divided. For example, the 112A ribeye is divided into a roast and steaks with some fat trim, shrink, and cutting loss. After obtaining all (trimmed to 1/4 inch or less exterior fat trim) retail cuts from a carcass there remains, 16.74 percent fat, shrink, and cutting loss of the original carcass weight that can not be sold as retail cuts.

An additional factor called retail shrink which includes pilferage, rewraps, conversion to other cuts, and spoilage, is applied to the 83.26 (100-16.74) percent. (Note 386 divided by 464 on fig. 1.)

Retail shrink was estimated at 3 percent, which is lower than the 5-percent shrink factor used previously. Beef rewraps, spoilage, and other losses have been reduced with boxed beef since retailers can better match purchases with demand (sales). Better store security has also decreased pilferage. With the allowance for retail shrink there is 374.85 pounds of retail beef available for consumer purchase from the original 1,000-pound animal (or 615 pound carcass). The boxed beef carcass price to the boxed beef wholesale value (on a retail weight equivalent basis) conversion factor is thus 1.641 (615 divided by 374.85).

Byproduct Quantity and Value

The hide and offal value computed by AMS and released in the *Livestock Meat Wool Market News* each week has been used to estimate the farm to carcass byproduct value or allowance for many years. The hide and offal value represents the noncarcass meat products that the packer sells from a steer carcass. Additional byproducts (mainly fat and bone) are produced in fabricating the carcass to boxed beef (table 1). Thus, a packer producing boxed beef gains, in addition to the hide and offal value, the value of the 13.98 pounds of bone, the 9.96 pounds of fat included in the AMS cut-out, and the 5.24 pounds of fat from the 50/50 trim or a total of 15.20 pounds of fat. To obtain a dollar value

the fat and bone amounts are multiplied times the *AMS National Carlot Meat Report* fat and bone prices. As in the past the value of the packer's meat sales must be converted to a live weight basis price. The meat and byproduct values are then added. The byproduct value is then divided by the total meat and byproduct value to find the percentage of the total value received by the packer that is contributed by the byproducts. This percentage can then be multiplied by the farm value to get the byproduct value.

A second byproduct allowance, between the carcass and retail value, has been calculated since 1978. It could still be calculated, but with the fat and bone being removed at the packing plant, the amount of byproducts obtained by the retailer is small. The fat trim also has less value because the retailer normally doesn't have enough volume to render it and the transportation cost to a renderer would be high relative to the fat value. This byproduct value would be about one-half cent per retail pound of beef sold and, as such, is considered too insignificant to warrant a separate monitoring and calculation effort.

Transportation Differential

A transportation differential is applied to the AMS boxed beef cut-out to reflect the average transportation cost of moving beef from Omaha to the major metropolitan areas where consumed. Transportation rates from Omaha to various parts of the United States were obtained. These were then combined with data on the State population and the relative level of consumption by area (using USDA's Nationwide Food Consumption Survey data). The transportation differential calculated for 1987 and 1988 was \$3.71 per 100 pounds of boxed beef (on a wholesale weight basis). The accuracy of this transportation differential will be examined at least yearly and updated as needed. Unless the transportation change is large, the change would not affect past estimates but would be applied in the future.

Calculation of the Series

Using the background above the new Choice boxed beef wholesale value series can be calculated as follows:

1. Using the AMS daily *National Carlot Meat Report* the Choice, Yield Grade 1-3, 550-700 pound boxed beef cut-out value, minus the value of fat and bone (from the same report), is recorded each day and averaged for the week. The weeks are averaged to obtain the month.
2. The monthly average value is then increased by the transportation differential.
3. The new monthly value (including transportation) is then multiplied by the boxed beef to retail conversion factor (1.641) to obtain the Choice boxed beef wholesale value series on a retail weight basis.

A comparison of the values obtained for this new boxed beef value and the previous gross and net carcass values are presented in table 2

for January 1987 to present. If only the middle or wholesale value were changed, without a change in the amount of product sold at retail, the new series would not be as high. Thus, the adjusted column estimates the new boxed beef wholesale value using current conversion factors. The carcass to adjusted series more nearly reflects the absolute value difference of moving from a carcass to a boxed beef value and is a closer approximation of the costs of boxing beef. The difference between the adjusted and new series reflects the conversion factor change to allow for the closer fat trim and more boneless cuts now being sold at retail.

Data for the past 18 months indicate that differences between the series appear to change mostly in proportion to the changes in absolute price levels.

Table 1--Retail mostly boneless beef cuts with 1/4 inch outside fat maximum as a percent of IMPS 100 series wholesale cuts for Yield Grade 2 & 3 carcasses

Retail cut	Ribeye	Brisket	2Pc. B0 Chuck	Knuckle	Top (in- side rnd)	Bottom Goose- neck	Strip Loin Sh. cut bnls	Top Sir- loin butt	Sirloin Flap	Sirloin Ball tip	Sirloin Tri tip	Tender- loin	Flank Steak
	112A	120	115	167	168	170	180	184	185A	185B	185C	189A	193
Subprimals as % of carcass 1/	3.39	2.59	17.92	2.87	5.82	7.26	3.91	3.39	0.49	0.54	0.69	1.47	0.45
Ribeye roast LO bnls	48.26												
Ribeye steak lip on	48.70												
Brisket roast PT cut		49.35											
Brisket roast flat cut		33.09											
Shoulder p-rst bnls			20.02										
Top blade steak bnls			2.07										
Underblade steak bnls			6.77										
Chuck pot roast bnls			15.06										
Chuck eye steak bnls			2.68										
CK eye edge pot roast			3.90										
Mock tender steak			4.15										
Trimings 73/27													
Neck pot rst bnls			6.91										
Shank crosscut bnls			3.91										
Beef cube steak				10.34	6.14	2.15		5.94					
Top blade pot roast bnls													
Tip roast				47.39									
Tip steak				29.73									
Top round steak					44.83								
Top round roast					29.79								
Heel of round													
Bottom round steak						14.27							
Bottom round rump roast						28.55							
Eye of round roast						14.19							
Eye of round steak						11.17							
Top loin steak bnls						8.23							
Ball tip steak							72.44						
Ball tip steak, thin										64.36			
GR beef No. 3 81/19			15.21	4.57	2.46	5.54	3.73	0.95	24.19	15.68	2.95	2.99	
Beef for stew			4.34		2.64								
Beef cubes SM													
Cubes for kabobs								7.05	14.07	4.15		8.72	
Flap meat strips									25.93	6.55	6.95		
Sirloin strips reg									24.07				
Sirloin strips thin									11.16				
Top sirloin stk B0								73.71					
Tri tip roast											20.86		
Tri tip steak											60.32		
Tenderloin roast												31.13	
Tenderloin steak												35.37	
Tenderloin tips												4.23	
BF flank steak cubed													33.04
Flank steak rolls													31.98
Flank steak scored													34.45
BF skirt steak bnls													
Skirt steak bnls cubed													
Beef strips thin													
Lifter braise strip													
Beef for stew (lean)													
Beef short ribs													
Short ribs BBQ													
Short rib flanken													
Short rib Sp Trim													
Beef back ribs													
Pastrami													
Shank meat													
Kidney													
Fat	2.60	16.82	14.55	7.04	13.62	15.10	23.61	11.80		1.04	8.15	16.69	
Bone													
Shrink	0.30	0.37	.12	0.46	0.35	0.42	0.22	0.32	0.58	0.97	0.14	0.50	0.26
Cutting loss	0.14	0.37	.31	0.47	0.17	0.38		0.23		0.25	0.63	0.37	0.27
Retail cut Totals	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 1--Retail mostly boneless beef cuts with 1/4 inch outside fat maximum as a percent of IMF'S 100 series wholesale cuts for Yield Grade 2 & 3 carcasses (cont'd)

Retail cut	Outside skirt	Inside skirt	Trimming SP	Trimming 73/27	Trimming 50/50	Short ribs	Back ribs	Pastrami	Shank meat	Kidney
Subprimals as % of carcass	0.47	0.44	1.83	2.15	13.70	.85	1.01	1.27	2.72	.24
Ribeye roast LO bnls										
Ribeye steak lip on										
Brisket roast pt cut										
Brisket roast flat cut										
Shoulder p-rst bnls										
Top blade steak bnls										
Underblade steak bnls										
Chuck pot roast bnls										
Chuck eye steak bnls										
CK eye edge pot roast										
Mock tender steak										
Trimming 73/27				100.00						
Neck pot rst bnls										
Shank crosscut bnls										
Beef cube steak	11.36		14.72							
Top blade pot roast bnls										
Tip roast										
Tip steak										
Top round steak										
Top round roast										
Heel of round										
Bottom round steak										
Bottom round rump roast										
Eye of round roast										
Eye of round steak										
Top loin steak bnls										
Ball tip steak										
Ball tip steak, thin										
GR Beef No. 3 81/19	9.83	10.88	32.92		61.75					
Beef for stew										
Beef cubes Sm			4.26							
Cubes for kabobs			12.94							
Flap meat strips										
Sirloin strips reg										
Sirloin strips thin										
Top sirloin stk B0										
Tri tip roast										
Tri Tip Steak										
Tenderloin roast										
Tenderloin steak										
Tenderloin tips										
BF flank steak cubed										
Flank steak rolls										
Flank steak scored										
BF skirt steak bnls	41.45	63.46								
Skirt steak bnls Cubed	15.54									
Beef Strips thin	15.63		6.44							
Lifter braise strip			10.40							
Beef for stew (lean)			16.43							
Beef short ribs						41.89				
Short ribs BBQ						16.79				
Short rib flanken						32.89				
Short rib Sp trim						7.57				
Beef back ribs							99.70			
Pastrami								99.60		
Shank meat									97.60	
Kidney										99.90
Fat	5.74	25.39			38.25	.36				
Bone										
Shrink	0.32	0.18	1.71			.14	.20	.25	.25	
Cutting loss	0.13	0.09	0.18			.36	.10	.15	.15	.10
Retail cut Totals	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
									Whlsl. cut	75.47
									Fat (break)	9.96
									Bone (break)	13.98
									Loss (break)	0.59
									Total	100.00

Sources: Agricultural Marketing Service for carcass to wholesale cuts, large U.S. beef packer and processor for wholesale to retail.

1/ This subprimal row lists the percentage each primal is of the carcass. The other rows indicate how that subprimal is divided into cuts, fat, shrink and loss.

Table 2--Comparison of Choice boxed beef
wholesale value series with current carcass values

Year	Boxed beef series		Carcass value	
	New 1/	Adjusted 2/	Gross	Net
Cents per retail pound equivalent				
1987				
Jan	162.5	146.2	135.5	134.0
Feb	165.7	149.0	138.9	137.5
Mar	165.7	149.0	140.7	139.5
Apr	179.0	161.0	152.2	150.9
May	191.2	172.0	161.4	159.9
June	189.8	170.7	159.1	157.6
July	175.6	157.9	150.2	148.8
Aug	170.7	153.5	144.0	142.6
Sept	175.2	157.6	146.4	144.9
Oct	174.4	156.9	146.1	144.6
Nov	172.2	154.9	143.9	142.4
Dec	170.9	153.7	142.6	141.1
1987				
Jan	171.5	154.3	146.5	144.7
Feb	177.2	159.4	149.9	148.3
Mar	181.4	163.2	155.8	154.0
Apr	185.1	166.5	158.4	156.7
May	195.0	175.4	168.0	166.2
June	186.8	168.0	160.1	158.2

1/ This is the new series as proposed. It is not consistent with the current published series because the retail weight equivalent changes. The comparable farm and retail values would also be higher because fewer retail pounds are obtained per 1000 pound animal.

2/ This adjusted series is an approximation of the new series assuming the current retail level of fat trim and percentage of bone-in cuts. It is about 10.1 percent less than the new boxed beef wholesale value series. The absolute differences between the adjusted and carcass value series estimate returns to the boxing process.

CYCLIC PATTERNS IN THE U.S. CATTLE INVENTORY

by

John Ginzel*

Abstract: Since 1928, five complete cattle cycles can be identified, in addition to the present one. The present cycle, which began in 1979, is quite different than previous ones. The expansion phase has been abbreviated and the liquidation phase has been extended. Given the effects from this year's drought, the current cattle cycle likely will not reach the end of its herd-liquidation phase until 1990 or 1991. The next cycle likely will feature less expansion than the average for the previous six cycles.

Keywords: U.S. cattle cycles, expansion phase, liquidation phase.

January 1 inventories of U.S. cattle have been reported since 1867. 1/ The overall trend in cattle numbers can be broken into three segments based upon inventory trends. The first segment is from 1867 until 1928, a period of relatively slow growth. A segment of more rapid inventory growth followed, from 1928 until 1979. Since 1979, the cattle inventory has had more liquidation than expansion.

*Agricultural Economist, Commodity Economics Division, Economics Research Service, USDA.

Cattle Cycles

A cattle cycle is identified within annual cattle inventories as a low- to-high-to-low pattern occurring over a span of years, with an expansion phase, a peak, and then a liquidation phase. DeGraff identified the first cyclic downturn in U.S. cattle inventory in 1890 with three completed cycles prior to 1928. 2/ This study will analyze cattle inventories and cycles since 1928. Five completed cycles can be identified since 1928. Presently, the U.S. herd is in the sixth cycle, which began in 1979 and likely will not conclude the liquidation phase until 1990 or later. The present cycle is behaving quite differently than any of the previous five cycles. The five completed cycles and the present cycle to date are plotted in figure 1.

Cattle cycles since 1928 typically have spanned about 10 years, with an expansion phase lasting 6 to 7 years, and a liquidation phase lasting 2 to 4 years. The five previous cattle cycles showed an increase in the cattle herd of 20 to 30 percent from low to high

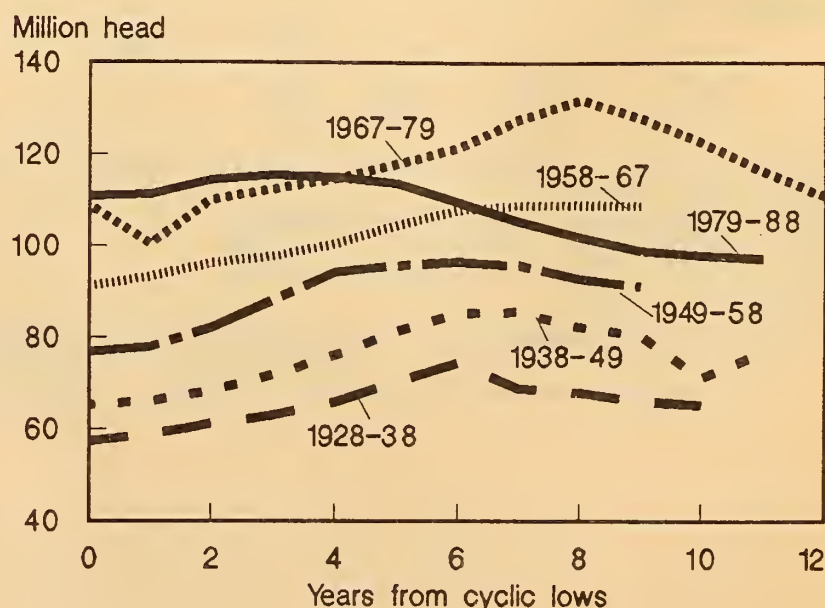
inventory. The liquidation phase, from a high to low inventory, averaged around 10 percent except for the unusually small herd liquidation during the 1958-67 cycle, which had a decline of less than 1 percent (table 1).

Present Cycle

There are several major differences in the current cycle than earlier cycles. The present cycle, which peaked in 1982, had an unusually short expansion phase of only 3 years. The liquidation phase is now into the seventh year.

Since the data series started, this cycle is the first to peak with a lower inventory than the previous cycle's peak. The cattle herd expansion phase showed a modest increase of only 4 percent compared with previous cycles' 20 to 30 percent expansion. The liquidation phase will span more years than any of the

U.S. Cattle Cycles



previous five cycles and the inventory decline will exceed the previous average. A 15 percent or greater herd liquidation is likely from the cyclic peak in 1982.

Average Annual Cattle Cycle Expansions And Liquidation Rates

Cattle herd expansion rates were unusually rapid during the two cycles which included World War II and the Korean War. Several years during these two cycles saw 6 to 7 percent annual rates increase in inventories. Thus, the average annual cattle herd expansion rates across the six cycles from 1928 to date likely are biased upward and would overstate a forecast expansion phase going into the 1990's. A slower expansion than the average 3 percent annual rate is more likely.

The present cattle cycle clearly is behaving differently than earlier cycles and suggests that the peak cattle inventory level of the next cycle likely will not exceed the 1982 herd of over 115 million head and could be only 105 to 110 million head. Unless, the expansion during the 1990's is longer than normal, longer than the typical 6 to 7 years of previous herd expansion phases.

Some Other Changes Within the Cattle Sector

A number of other changes have occurred within the cattle sector aside from the inventory. The mix of cattle in the herd has shifted away from dairy cattle toward beef. As recently as the early 1950's, the U.S. cattle herd had more dairy cows than beef cows. In the 1988 cattle inventory, beef cows exceeded dairy by more than three to one.

The mix of cattle slaughtered also has changed considerably over the years. A much smaller proportion of the animals slaughtered are calves. In 1950, for example, commercial cattle slaughter was under 18 million head, and commercial calf slaughter was nearly 10 million head. By contrast, commercial cattle slaughter in 1987 had increased twofold to 35.6 million head and commercial calf slaughter was about one-fourth as large in 1950 at 2.8 million head. The trend toward a smaller proportion of the calf crop slaughtered as calves will likely begin to stabilize at some point. The slaughter of mature cattle now is predominantly fed cattle from feedlots.

The average carcass weight for mature cattle has increased sharply over the years. The average federally inspected cattle carcass weight for 1987 was 662 pounds per head, compared with 541 per head for 1950, over a 20 percent increase. Thus, the decline in annual beef production is far less than the decline cattle inventories.

Possible Effects from Drought

Drought this year likely will induce some farmers and ranchers to abandon or modify plans for expanding beef and dairy herds. However, the reduced cattle inventory for 1988, coupled with USDA's decision to permit haying and grazing on idled acreage in drought-impacted counties and with other Government assistance, should help reduce the amount of drought-forced liquidation from that seen in drought stress periods of the 1930's, 1940's, and 1970's.

Costs and returns for beef cow-calf operations have shown marked improvements in 1986, 1987, and likely in 1988, except in areas impacted by drought. Breeding herd liquidation pressure is largely past for most producers. The uncertainty at this time is when producers will begin retaining sufficient replacement heifers to expand the breeding herd. Expanding U.S. cattle inventories are not expected before 1990 or 1991 at the earliest.

The first sign of the rebuilding process is a reduction in cow slaughter. This has already occurred for the beef cow herd. However, a reduction in heifer slaughter, which allows for increasing the calf crop in upcoming years, has yet to occur. Expanding calf crops typically are not seen until one or more years after reduced cow and heifer slaughter occurs.

Conclusion

Given some of the structural changes within the cattle sector during the 1980's, the next cattle cycle in the 1990's likely will not feature as rapid an annual expansion rate as the average of the previous six cycles. Depending upon the number of years of expansion during the 1990's, the herd peak may only reach 105 to 110 million head compared with the previous cyclic peak of 115.4 million head likely in the mid to late 1990's.

Table 1--Cattle Cycles - Numbers of cattle on farms by years, Jan 1 cattle numbers 1,000 heads 1/

Cycle Year	Beginning year of cattle cycle from cyclic low point					
	1928	1938	1949	1958	1967	1979
0	57,322 LW	65,249 LW	76,830 LW	91,176 LW	108,783 LW	110,864 LW
1	58,877	66,029	77,963	93,322	109,371	111,242
2	61,003	68,309	82,083 KW	96,236	110,015	114,351
3	63,030	71,755 WW	88,072 KW	97,700	112,369	115,444 HI
4	65,801	76,025 WW	94,241 KW	100,369	114,578	115,001
5	70,280	81,204 WW	95,679	104,488	117,862 PC	113,700
6	74,369 HI	85,334 WW	96,592 HI	107,903	121,539	109,749
7	68,846	85,573 HI	95,900	109,000 HI	127,788	105,468
8	67,847	82,235	92,860	108,862	132,028 HI	102,000
9	66,098	80,554	91,176	108,783	127,980	98,994
10	65,249	77,171			122,810	97,900 EST*
11		76,830			116,375	97,600 EST*
12					110,864	
13						

	Annual Percentage of Previous Year						Average
	1928	1938	1949	1958	1967	1979	
1	102.7	101.2	101.5	102.4	100.5	100.3	101.4
2	103.6	103.5	105.3	103.1	100.6	102.8	103.1
3	103.3	105.0	107.3	101.5	102.1	101.0 HI	103.4
4	104.4	106.0	107.0	102.7	102.0	99.6	103.6
5	106.8	106.8	101.5	104.1	102.9	98.9	103.5
6	105.8 HI	105.1	101.0 HI	103.3	103.1	96.5	102.5
7	92.6	100.3 HI	99.3	101.0 HI	105.1	96.1	99.1
8	98.5	96.1	96.8	99.9	103.3 HI	96.7	98.6
9	97.4	98.0	98.2	99.9	96.9	97.1	97.9
10	98.7	95.8			96.0	98.9 EST*	97.9
11						99.7 EST*	
12							
13							

Expansion and Liquidation Phases Percentage

Low-Hi	129.7	131.1	125.7	119.5	121.4	104.1
Hi-Low	87.7	89.8	94.4	99.8	83.1	84.5 EST*

WW = World War II; KW = Korean War; PC = price controls.

1/ Annual U.S. cattle inventory statistics from various issues of the Livestock and Meat Statistics, USDA, Washington, D.C.

* Estimated based upon early August conditions.

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